OBSERVATIONS AND RESEARCHES

MADE AT

THE HONGKONG OBSERVATORY,

IN THE YEAR

1884.85.

BY

W. DOBERCK,

GOVERNMENT ASTRONOMER.

HONGKONG:
PRINTED BY NORONHA & CO.,
GOVERNMENT PRINTERS.

1885.

National Oceanic and Atmospheric Administration

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Information Manufacturing Corporation
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Rocket Center, West Virginia
September 14, 1999

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HONGKONG OBSERVATORY,
1*st January*, 1885.

SIR,—For the information of His Excellency the Governor I have the honour to forward my annual report for 1884.

2. The necessity for an Observatory in Hongkong was recognised years ago. In 1879 the Royal Society suggested its establishment, and in 1881 a report was drawn up by Colonel PALMER, R.E., but his suggestions were not carried out, as the scheme submitted by him was considered to be too extensive for a beginning.

3. In May 1882 the Surveyor General submitted a report with reference to the Astronomical and Meteorological Observatory to the Secretary of State for the Colonies. The Astronomer Royal, to whom a copy of this report was forwarded, was of opinion, that the smaller and simpler scheme therein suggested, would suffice for present requirements, and that the most pressing needs of the Colony were a time-ball and a meteorological service. The Surveyor General's report received then His Lordship's approval, and early in 1883 I was appointed Director of the Observatory.—Meantime the Kew Committee, the Meteorological Council, the Meteorological Reporter to the Government of India and other authorities had opportunities of giving expression to their views on the subject.

4. I spent the following spring in inspecting the apparatus, that had been previously ordered or that I was instructed to order, and arranging details with the makers, as well as in studying the methods of observation adopted at the Royal Observatory, and the verification of meteorological and magnetic instruments at Kew.

5. The meteorological and magnetic instruments were ready before my departure from England. The Crown Agents for the Colonies arranged to have them carried without transhipment to Hongkong, and I started in June as passenger on the same steamer, accompanied by Mr. F. G. FIGG, who in the mean time had been appointed to be my first assistant.—The horological apparatus and the time-ball were not ready till long after my arrival in the Colony.

6. On my arrival here, I found the foundations of the Observatory already laid. In fact some progress had been made with the brickwork. The Surveyor General had selected the site some years ago, and it proved to be by far the best spot in the Colony for making scientific observations. The neighbourhood of the City of Victoria would not be suitable, as the mountains shut off from view a great portion of the southern sky, extending up to 25° of altitude, and for the same reason it is not possible to determine the true velocity and direction of the wind near the city. It is also likely, that the ferruginous rocks would deviate the plumb line, not to mention the magnetic needles.

7. I spent the following months partly in arranging details connected with the building and the foundations for the instruments, partly on a tour to the Treaty Ports of China, undertaken by order of His Excellency the Governor, to arrange to have meteorological observations made and regularly forwarded to the Observatory. The Inspector General of the Imperial Maritime Customs of China, who has contributed so much to forward the cause of science in that country, subsequently ordered a copy of all meteorological observations henceforth made in the harbours and lighthouses along the coast to be forwarded to me, and instruments of approved pattern are now being distributed among the stations.—It is certain, that not only the meteorology of China will benefit by Sir ROBERT HART's enlightened action, but the meteorology of the northern hemisphere will be forwarded, when reliable observations are made on a uniform plan in that extensive country.

8. The Observatory is built on the peninsula of Kaulung facing the harbour. It stands on the top of Mount Elgin, a small hill built up of decomposed granite, rising abruptly on all sides from the surrounding level ground and culminating in two prominences distant about 400 feet from each other. The top of the eastern prominence is flat, and forms, roughly speaking, a circle of about 200 feet diameter. Here the main building is situated. The magnetic hut is erected on the western prominence, the top of which was levelled and forms a rectangle 36 feet by 30 feet.

9. By the 1st January the main building was so far finished, that I could take up my residence there and start tri-diurnal meteorological observations. It is a rectangular block, 83 feet long and 45 feet wide (not including the transit room). The upper floor is devoted to my quarters. The ground floor comprises 4 rooms, each 20 feet long, 16 feet wide and 14 feet high, and 2 small rooms behind these. In the entrance hall are placed the telegraphic apparatus, through which the Observatory is connected with the Police Stations in Kaulung, and through them with the Central Police Station in Hongkong. To the right is my office, where the library is placed, contained in glazed teak-wood cases. The clock room, behind which is the galvanic battery room, is to the right of this. From the clock-room a door leads into the transit room. To the left of the entrance hall is the computing room, next to which is the instrument room, where the barometers, the barograph and the thermograph are placed, behind which is the photographic laboratory.—Every part of the two last rooms, including ceilings, floor and furniture, is painted dark red, and there are only a few panes of double red glass in the windows.

10. A one-storied block of outbuildings, containing servants' quarters, store-rooms, &c., communicates with the back-verandah by a covered passage.

11. The magnetic hut is 17 feet long, 13 feet broad, and the roof rises 11 feet high. It is made of wood, painted white outside and inside. Bamboo chips instead of nails were used in its construction as well as in the furniture. It has double doors, respectively louvered and glazed, to the north and south, and two windows on each side as well as two frosted glass windows in the roof, which throw light on the verniers. On top of massive teak-wood blocks sunk 3½ feet in the ground and rising 4 feet above the floor are placed the unifilar magnetometer and the dip-circle. The former is placed north of the latter, and it is therefore convenient to observe the pole-star reflected from the speculum by opening the door. The sun and stars near the prime vertical can be observed through the windows on either side. The hut is very comfortable but is placed at an inconvenient distance from the main building. A broad road connects the two buildings and includes a bridge across the gap between the hills.—The magnetic observations are printed in my report of the 15th December (*Appendix* 1 to the forthcoming "*Observations and Researches in 1884*") and it is therefore unnecessary to make further reference to these observations.

12. As the time-service has not yet been started and as no astronomical observations have been published, it would appear most proper to defer the description of the astronomical instruments, some of which have not yet been erected.

13. The tri-diurnal meteorological observations, that were started at 10 a. on the 1st January, were continued up to the end of the year. In January and February observations were made at 10 a. 4 p. and 10 p. as printed in the *Weather Reports* for those months. In March and April they were made at 10 a. 1 p. 4 p. 7.45 p. and 10 p. From the 1st May till the end of the year they were made at 10 a. 1 p. 4 p. and 10 p. From the 1st April till the 1st October the standard barometer was generally read also at 1 a. Phenomena occurring at other hours including clouds of the *cirrus* type were also carefully noted.

14. The observations made at $7^h.45^m.$ p. ($7^h.0^m.$ a. Washington Mean Time) the epoch adopted for the International Simultaneous Meteorological Observations were transmitted to the Chief Signal Officer, U. S. A., Washington, D. C. They embrace the height of the barometer reduced to 32° Fahrenheit and to sea level, dry and damp bulb thermometers, relative humidity, direction and velocity of the wind, and also observations on rain, clouds and state of the weather. Since the 1st May only the latter observations were actually made at the time, it being preferred to read off the other elements from the curves described by the self recording instruments below described.

15. From the 1st January a new series of meteorological observations made according to my "Instructions for making Meteorological Observations" were commenced at different points in the Colony: At Victoria Peak observations of the barometer, dry and damp bulb thermometers, direction and force of the wind, clouds, sea and state of the weather are made at 7 a. 10 a. 1 p. 4 p. 7 p. and 10 p. The results for 10 a. 4 p. and 10 p. are published in the monthly reports. At the latter hour the self-registering thermometers including black bulb and grass minimum are read. The rainfall is collected in two gauges. One of them is an old roof-gauge. The other is placed one foot above the ground. Only the results from the latter are published.

16. Those observations being made at so high a level are of considerable importance, and it is to be regretted, that the authorities have not yet made arrangements for having observations made also at 4 a. In the absence of self-recording instruments the observations are not complete without the 4 a. observation. It would moreover be desirable at some future time to erect a self-recording anemometer on the look-out similar to the one on top of the Observatory. The comparison of the two records would clearly reveal certain most important features connected with the wind prevalent at different altitudes above sea level, which would deepen our insight into the law of storms in the China Sea.

17. At Cape d'Aguilar observations of thermometers, wind, clouds, sea-surface and weather are made at 4 a. 10 a. 4 p. and 10 p. as published in the monthly reports, but as these observations are wanting in accuracy, their publication with the exception of the state of the sea-surface, will be discontinued next year.

18. At Green Island the wind, clouds, sea-surface and weather are observed at 4 a. 10 a. 4 p. and 10 p. As the island is within 4 miles of the Observatory the station is not supplied with instruments, but the observer appears to be doing his best. At Stone Cutters' Island, which is within 2 miles of the Observatory but at a much lower level, the rain is measured at 10 a. as published.

19. All the observations made at these four stations are revised, corrected and reduced at the Observatory, and the instruments &c. are occasionally inspected.

20. The *barograph* was erected in March and worked without interruption since the 1st April. The slab is placed on a teak-wood table, which is firmly screwed to the floor.

21. The image of the flame of a Kerosine lamp, enlarged by a condenser, is thrown upon the void space, narrowed by a slit, above the mercury of a barometer of about three quarter inches internal diameter. By means of a photographic lens an image of this illuminated slit is thrown upon a cylinder covered with a sheet of sensitised paper, 23 inches long and 5¾ inches wide, which is revolved by a clock work, so that the portion covered by the image moves 0.364 inch an hour, the clock work moves also a shutter, that cuts off the light of the lamp from two minutes before, till two minutes after every even hour. The upper edge of the inverted image of the slit rises or falls as the mercury falls or rises in the barometer, but the lower edge is not permanently fixed, but rises or falls as the temperature of two zinc rods, fixed beside the barometer, falls or rises, and by aid of an adjustable glass lever the amount of displacement of the edge is made exactly equal to the temperature correction, that otherwise would have to be applied to the hourly readings.

22. The paper may be kept on the cylinder for two days, after which it has to be changed,—this being invariably effected between 10 a. and 11 a.,—developed, fixed, washed and dried. The photograph is ready to be measured three days after being removed from the cylinder. It is then placed between two glass plates in the *tabulator*, and the distances between the upper and lower edges of the blackened portion of the paper, which is interrupted by the two-hourly white lines, are read off at every hour or oftener, if required, by aid of a vernier capable of being read to 0.001 inch, two fine wires fixed in empty sight-tubes being made to cover the respective edges.

23. The standards of reference are obtained from 10 a. 1 p. 4 p. and 10 p. readings of the standard barometer, corrected and reduced to 32° Fahrenheit. From the 1st April till the 1st September the 1 a. readings were also made use of, but experience proved this to be superfluous. The nominal inches on the tabulator should be greater than true inches in the same proportion as the magnified image of the slit is greater than the true image, which is about 1½. Experience shows, that this has not been strictly attained. The nominal inches are 1.594, whereas they should be 1.534 inches long. But as the pressure here nearly always changes very slowly and regularly within 24 hours, it is not necessary to know this proportion with great accuracy, and it is for the same reason difficult to determine it. The above number was derived from observations made during the Typhoon in September and agrees with other observations.

24. The room in which the barograph and the standard barometer are placed is carefully shut up, so that the daily range of temperature is reduced below half a degree. Three large Kerosine lamps, always burning in the room, raise its temperature in winter a couple of degrees above the temperature of the air outside, while in summer the room is colder than the air. The temperature is observed by reading a carefully verified thermometer immersed in mercury in a test-glass of the same diameter as the barograph barometer. The constancy of the temperature favours the accurate co-operation of the different parts of the apparatus, which are at a uniform temperature, just as a clock goes better in a room, where the temperature does not change much, because the different parts of the pendulum have the same temperature.

25. The baregram readings are entered in a journal kept in the computing room. The figures are corrected for the scale-error of the tabulator, and when reduced to standard by comparison with the readings of the standard barometer (corrected and reduced to 32° Fahrenheit), they are entered in the tables printed in the monthly reports.

26. The *thermograph* was erected in March and worked without interruption since the 1st April. The slab is placed on massive teak-wood blocks, firmly screwed to a slab of granite, which rests on solid masonry.

The bulbs of the recording thermometers (dry and damp bulb) are placed in a zinc screen outside the northern window of the instrument room, which is substantially boarded, and in which are also placed two thermometers with bulbs,—dry and damp,—of similar dimensions. These have been carefully verified at different temperatures by comparison with our standard thermometers. The tubes of the recording thermometers are bent and enter the instrument room through two slots (5.6 inches long, 1.2 inches broad and 9.2 inches asunder) bored in the boards. They then rise vertically and are held by pieces of brass, which may be raised or lowered to some extent. The slots are filled with non-conductive material, so that no air can pass out from the room. An airspeck is introduced into the mercury of each thermometer. These airspecks are photographed on the cylinder. A lamp is placed on each side of the thermograph, whose lights are condensed by lenses and reflected towards the cylinder from mirrors, placed on the slab behind the thermometer tubes. The light penetrating through

the airspecks is narrowed by slits, and the same arrangement is made to obtain the photographic record as in case of the barograph, but the photograph exhibits in this case two curves, which represent the heights of the dry and damp bulb thermometers interrupted by the two-hour lines. The record of the damp bulb is placed vertically under that of the dry, so that there is only one time-scale. One or two *zero lines*, from which to measure are obtained by allowing the light of either lamp to shine through a small hole in either of the frames, in which the slits are cut.

27. The photographic sheets obtained from the thermograph are treated exactly as those obtained from the barograph. When they are dry the distances of the points on the curves from the zero line are read off by aid of glass scales graduated to degrees. The temperature in either case corresponding to the zero line is obtained daily by comparison with the simultaneous readings of the thermometers in the screen, which are corrected before being entered in the thermograph journal. The degrees on the reading scales should be larger than the degrees on the thermometers in the proportion, in which the images are magnified by the photographic lens. This has been attained in case of the damp bulb, but the degrees on the dry bulb scale must be multiplied by 0.980 in order to represent the readings of the thermometer. A correction is applied for this before the readings are entered on the tables printed in the monthly reports.

28. In order to prevent by any possibility a mistake in the date of the photographic sheets, the weekday, month and date are written on the back of every sheet, as it is removed from the cylinder.—Before my appointment the Crown Agents for the Colonies had ordered the barograph and the thermograph as well as the anemograph through the Meteorological Office. The tabulator, reading scales &c., were subsequently ordered at my suggestion as well as the pluviograph. Unfortunately a large stock of waxed paper had also been supplied by the Secretary to the Meteorological Office, who was not aware, that argento-bromide paper had for years been successfully adopted in India. Now the necessity for iodising and sensitising every photographic sheet has caused a deal of trouble during the damp and hot season. The sensitised sheets were found not to keep for two days on the barrel. The sheets had then to be changed every day. Even the iodised sheets did not keep for any length of time. Only freshly iodised sheets could be sensitised with any certainty of success, and this added enormously to the labour a great part of the time of the second assistant being taken up by this work. Even when every precaution was taken, the result was not nearly as good as during the winter. Tannin, as recommended by Chambers, was tried, but made no improvement here. A supply of MORGAN & KIDD's argento-bromide paper has now been ordered, and thus the trouble of iodising and sensitising the sheets will be saved.—Another cause of occasional failure rests with the Kerosine lamps, but the new paper being so much more sensitive, the lamps are not likely to give any trouble, when the new process is introduced. It may also be found possible to secure Kerosine oil of superior quality. No great difficulty was encountered in keeping the damp bulbs constantly wetted, but occasionally the bulbs were found to be dry.

29. The clocks of the barograph and the thermograph were rated by shortening the pendulums, but it was found inconvenient to shorten them sufficiently. The outstanding error was corrected by laying suitable pieces of iron and a few small leaden weights on the flat upper surfaces of the bobs, the rates being subsequently kept constant by adding or removing one or more of the small weights. This arrangement proved so satisfactory, that the clocks when accurately started one morning were in by far the greatest number of cases found as accurate next morning, and the error seldom exceeded half a minute, and never 45 seconds.

30. The *anemograph* was erected in the course of January and worked without interruption since the 1st March. It is erected on a turret, built of strong teak-wood timber, fastened to the roof of the house by massive iron bolts. The turret rises 8 feet above the flat roof of the main building.

31. This instrument registers the number of miles traversed by the wind and also its direction. It consists of a ROBINSON's anemometer of large size, the cups of which are 45 feet above the ground and 155 feet above mean sea level. The shaft carrying the cups is supported by friction balls running in a groove on top of the direction shaft and terminates in an endless screw, which working through toothed gearing drives a cylinder in the turret, round which a thin strip of brass forming a screw is wrapped. Round another larger cylinder, which is driven by a clockwork, is wrapped the metallic paper, on which the space traversed by the wind is recorded by the screw-shaped pencil, which rests on it with part of the weight of the cylinder round which it is wrapped. The pencil has only one turn on this cylinder and its pitch is $2\frac{3}{4}$ inches long, equal to a scale of 50 miles printed on the paper. ROBINSON's original factor—3 is adopted in our anemometric records. Whenever from further investigation a new and reliable factor, dependent on the velocity of the wind shall have been determined for an instrument of exactly similar construction, it will be easy to alter the figures in our tables, but the action of the instrument is so perfect that no allowance need be made for friction.—In order to obtain a sufficiently distinct trace of the direction of the wind, the vane consists of two wind mill wheels, which keep their axis at right angles to the wind. With any change they move and carry with them a hollow brass tube, which contains, but is not connected with, the velocity shaft and acting through toothed gearing moves another thin screw-shaped pencil, which registers the direction on another part of the metallic paper. The pitch is equal to that of the velocity pencil and equal to a scale of the cardinal points of the compass printed on the paper. The clock moves the cylinder on which the paper is fastened 0.366 inch per hour.

32. The paper must be changed every morning about 10 a. The direction and velocity are then read off by aid of divided glass scales and immediately entered in the table printed in the monthly reports. The working of the instrument has been satisfactory. It is made extra strong and worked as well in the typhoon as in a gentle breeze.

33. The *pluviograph* was erected in the course of January and worked without interruption since the 1st March. It is made of cast iron and stands on masonry in the ground about 75 feet S.W. of the nearest part of the main building. The rain collected by the funnel passes through a tube into a copper cup floating in mercury protected from oxidation by glycerine. As the cup is filled it sinks in the mercury and registers the amount of descent by aid of a fine lead pencil on a ruled card fastened on a cylinder revolved by clockwork. When 0.2 inch have been collected, the cup is emptied spontaneously by a siphon arrangement, 0.1 inch of rain is represented by a length of 0.344 inch on the card, which was found correct. The hour lines are printed 0.365 inch apart, but it was not found practicable to lengthen the pendulum sufficiently for this and new hour lines 0.372 inch apart have to be drawn on the cards. Care was taken by the maker to arrange, that the siphon should empty the cup as quickly as possible, and it was only during unusually heavy squalls, when the rain poured down in torrents, that it failed somewhat in its action, the amount entering the cup while it was emptying itself being lost. It was feared that the heavy rain might mechanically push down the cup, but this has scarcely been noticed in practice. For further security an ordinary rain-gauge, the rain collected in which is measured at 10 a., is kept beside the pluviograph, and it has occasionally been found advisable to correct the pluviograms by the readings of that gauge.

34. Early in the summer the place had not yet been turfed and the dust of decomposed granite raised by the wind was most destructive to the acting parts of the instruments and particularly so to the action of the rain-gauge. When the Governor last summer honoured the Observatory with his presence, His Excellency remarked this disadvantage, and the place was soon after turfed, since which time the rain-gauge has acted smoothly.

35. The pluviograms are read off by aid of a simple scale and immediately entered in the tables printed in the monthly reports.

36. The *sunshine-recorder* is placed in a groove in the coping stone on the parapet 34 feet above the ground. In construction and adjustment it is similar to an ordinary sun-dial, but the style throwing the shadow is replaced by a solid glass ball, which acts as a burning glass, and the hour circle consists of a blue card, on which the hours are printed, and which is changed every evening. Whenever the sun shines brightly, it burns a hole in the paper, and by comparing the burned trace with the half-hour lines it is easy to estimate, how many minutes the sun was shining every hour. The figures are immediately entered in the table printed in the monthly reports. Care is taken to keep the glass ball clean.

37. The barograph, the thermograph and the anemograph were made by Mr. MUNRO of King's Cross, London, and are as excellent specimens of workmanship as might be expected from this well-known maker. The principal part of Mr. FIGG'S time has been occupied in attending to the selfrecording instruments and tabulating the records,—a task in which he has exhibited much patience and perseverance as well as that conscientious care, for which he was recommended to me by Mr. WHIPPLE, Superintendent of the Kew Observatory, and to which the great accuracy of our results is to a great extent due.

38. As stated in the "Instructions for making meteorological observations &c." meteorological instruments forwarded by observers, who regularly send their registers to the Observatory, are verified here free of cost. During the past year the following number of instruments has been verified and certificates issued :

Barometers : 13

Thermometers : 126

Anemometers : 1

39. The *monthly weather reports* up to July inclusive have been published. The tables are ready for the August and September reports. The typhoons in August are being investigated. The principal tables for the October and November reports are ready and some progress has been made in tabulating the records for December. I expect to be able to publish these reports in the course of next spring.

40. Some progress has also been made with the *annual weather report for 1884* and with the *five-day means of the principal meteorological elements*. The volume of "Observations and Researches made in 1884" will be published as soon as these reports are ready.

41. The *China Coast Meteorological Register* was issued daily from here. Through the courtesy of the Great Northern and of the Eastern Extension Australasia and China Telegraph Companies I received daily telegrams from Wladiwostock, Nagasaki, Shanghai and Amoy, and from Manila respectively. Subsequently the Superintendent of the latter Company was kind enough to supply telegrams

from Foochow and Haiphong in addition, but an even more important addition was made, when he in autumn arranged to have meteorological observations started at the telegraph station in Bolinao (Luzon). The telegraphic reports embrace generally readings of the barometer and the attached thermometer, dry and damp bulb thermometers, direction and force of the wind, state of the weather and amount of rain.

42. The Great Northern Telegraph Company receives the telegrams for 10 a. and 4 p. (previous day) during the forenoon. The E. E. A. & C. Telegraph Company receives the 10 a. and 4 p. observations separately. The Superintendent of the Station in Bolinao in the course of October commenced to forward observations also at other hours, whenever he apprehended atmospheric disturbance in the neighbourhood of Luzon. He then also observed the direction, whence the clouds were coming. The importance of similar telegraphic information from a gentleman of scientific training during the coming typhoon season cannot be overestimated.

43. As soon as possible after 10 a. and 4 p. observations made here similar to those received are forwarded to the two Companies.—The telegrams are exchanged between the Telegraph Offices in Victoria and the Observatory by means of either of our two chair-coolies. Of course it would be better to exchange the information through telegraph. There is a cable across the harbour through which the Police Stations are connected, but it has not been used for transmission of such messages. If it were possible to place the Observatory in direct communication with the Telegraph Companies Offices, the information would be supplied much sooner than is possible under existing circumstances.

44. As soon as the telegrams are received they are revised, corrected and reduced and the most prominent features and changes of the weather are pointed out, as well as the wind over the open sea between Shanghai, Hongkong and Luzon indicated by the gradients, the constants being statistically determined. Early information about typhoons is also issued, the existence of which is generally anticipated from observations here taken in connection with the general distribution of pressure &c., before it is indicated by observations contained in the telegraphic reports from any individual station, that may be situated nearer to the respective disturbance.

45. Every day the general whereabout of the centre and its progress since previous day are explained, and when, as frequently occurs during the progress of typhoons, the telegrams are not received, the information is based exclusively upon observations made here. In this part of my work I derived great help from Ferrel's theoretical papers and particularly from Meldrum's illustrious researches.

46. The Clerk of the Department has charge of the calculations connected with the register and as soon as copies of same are ready—generally about 1 h. 30 p.—they are forwarded by one of the chair-coolies to the following addresses:—

H. E. the Admiral of the Fleet.
The Harbour Office.
The Great Northern Telegraph Company.
The *Hongkong Telegraph.*
The *China Mail.*
The *Daily Press.*

47. Occasionally complaints have been received, that the register was not received at a sufficiently early hour.

48. A meteorological register containing the 4 p. observations made here, is sent in the evening to the *Daily Press*, which is a morning paper.

49. Whenever, as does not often occur, bad weather prevents the launch from running between Hongkong and Kaulung, or when information concerning typhoons, which should be published immediately, is at hand, a telegram is sent through the Police Stations to the Central Police Station in Hongkong, from which it is telegraphed to:

Government House,
The Government Offices,
Harbour Office,

and copies of the telegram are despatched by the Central Station to:

The Great Northern Telegraph Company.
The E. E. A. & C. Telegraph Company.
The *Daily Press.*
The *China Mail.*
The *Hongkong Telegraph.*
The Hongkong Club.
The Chamber of Commerce.
The Naval Yard.
The Commissariat.
The Surveyor General (when the Government Offices are closed).

50. It was in the course of the year arranged, that I am not to control the distribution of these telegrams, for which my responsibility ceases, as soon as they have been properly forwarded from the Observatory.

51. In fact now that meteorological signals can be exhibited from this side of the harbour, the distribution among so many addresses is perhaps unnecessary, and with reference to the Telegraph Companies I have formed the opinion, that telegrams concerning typhoons should be forwarded only to those Treaty Ports, to the ships in which their contents would be of importance in each individual case.

52. In the latter part of August a mast for hoisting police and storm-signals erected at Tsim-sha-tsui was furnished with the system of signals explained in my notice of the 11th August (Appendix F), and a gun was placed at the foot of the mast for giving warnings to the Colony.

53. The signals, although they were rather light,—being made of perforated canvas framed in leaden pipes,—blew down and were damaged, because the cord, that supported them, was far too weak. At the time the water-police had not yet taken possession of the new barracks and there were only a couple of English constables living in the old station, but it would be impossible to refer in too high terms to the conduct of the police, who are charged with hoisting the signals, both under those difficult circumstances and also afterwards.

54. A new set of signals made of rattan have since been made at the suggestion of the Surveyor General, but they are only 4, while the original signals were 6 feet in diameter. Whether they will be sufficient, remains to be seen. At any rate it is to be hoped, that arrangements will be made to have them hoisted to the top of the mast, which was reserved for these signals.

55. The notice referred to was extensively circulated and it was clearly stated, that the signals are hoisted solely with the object of informing masters of vessels leaving the port concerning the whereabout of the centre of typhoons, and that local storm-signals would be given by firing the gun,—so that it is surprising, that a portion of the public should be under the impression, that the signals indicate strong wind in the Colony, but no doubt more correct notions will get abroad next season.

56. Through these signals supplemented by the information given in the daily registers, masters of vessels are enabled to form an opinion of the winds and weather,—fine in some places foul in others, —likely to be encountered on the voyage, and to select the best time for starting all according to their destination. But after all I have learned, that cases still occur, where a captain, who is less familiar with typhoons, delays his ship in port, although the information issued to a practical meteorologist implies, that he is likely to encounter fine weather on a voyage to the port, for which he is about to start,—while another ship starting at the same time for some other port may run great risk.

57. To a port frequented by so vast a shipping as Hongkong it would be an advantage to have trustworthy information concerning bad weather likely to be encountered by each individual ship leaving the port placed within reach of every captain about to leave the port, and this can only be effected by allowing them to telegraph to me for information, adding the name and destination of the ship in question. Similar enquiries may in England, on payment of one shilling for the message be addressed to the meteorological office, but the answer contains only a guess at the weather expected next day, while in the China Sea it would be possible to give information concerning the weather likely to prevail on the voyage.

58. But in order to effect this it would be necessary to appoint a telegraph clerk in the Observatory. Occasionally during the past season masters of vessels have sent one of their mates over to make enquiries, and I have done my best to give them the required information, but at serious inconvenience owing to the smallness of the staff attached to this Department.

59. I devoted part of my time in the autumn of 1883 in studying past records of the weather kept by officers of the Harbour Department and Mr. FIGG assisted me in taking monthly means of observations. The results were published in the Gazette (Appendices A–C to "Observations and Researches in 1884"). He also took monthly means of the height of the barometer registered for over twenty years in the Harbour Office, but as some difficulty was encountered in ascertaining the corrections, which the barometers required, the results have not yet been published and will not be of much importance when published.

60. Beside the reports to appear in the "Observations and Researches in 1884," which will include a complete barometric determination of the height of Victoria Peak, I have published the following papers:

a. "On the Rainfall and Temperature of Markree, Sligo." (In "Quarterly Journal of the Royal Meteorological Society" April, 1884).

b. "Markree Observatory." (In "The Observatory. A monthly review of astronomy." October and November, 1884).

61. During the past year my time was to such an extent occupied in erecting and adjusting the instruments, in making the necessary arrangements of the methods of using them and in official correspondence, that I am not able to add a catalogue of the scientific instruments and books to this year's report. I also regret having been at times behind-hand in acknowledging the receipt of publications from other scientific centres and from individuals and having been forced by want of time to neglect my scientific correspondence in general, but although during the first portion of the new year several new instruments will have to be started, I expect to be able to attend more regularly to my duties in this respect.

62. Officers of the Royal Navy and Officers of the French squadron in China as well as numerous captains of merchant vessels have forwarded to me meteorological observations made during typhoons, by aid of which I have been enabled to investigate those atmospheric disturbances, from which investigations results useful to the navigation of the China Sea will follow.

I have the honour to be,

Sir,

Your most obedient Servant,

W. Doberck,
Government Astronomer.

The Honourable W. H. Marsh, C.M.G.,
Colonial Secretary,
&c., &c., &c.

ANNUAL WEATHER REPORT FOR 1884.

The construction of accurate average values of the meteorological elements forms perhaps the most important operation in connection with the discussion of meteorological observations. Apart from the insight into the nature of a climate, which is gained from a comparison of the averages with those computed by similar methods for other places in the world,—it is impossible to thoroughly understand the indications of the instruments or the features presented by the weather, unless it is known accurately, how much the phenomena differ from their average values. But unfortunately many years' observations must be at hand, before trustworthy averages can be derived, *i.e.*, such as are likely to be equal to the averages of future years. A very different number of years is required in case of the different elements, but it is generally supposed that monthly means may be formed from ten years' observations. A longer series is required for five-day means, and again a much longer series for daily means, and there are various interesting questions especially concerning the cosmic aspects of meteorology, that can be answered only when trustworthy daily means are available.

From these considerations it will appear, how very imperfect must be conclusions drawn from a single year's observations,—but on the other hand each single year has to be discussed, before more accurate averages can be obtained. In the following tables the hourly and monthly means of some of the principal elements for the past year are exhibited. Such tables as would be positively misleading, owing to their being constructed from a single year's observations, have been suppressed in this report.

Table I shows the mean height in inches of the barometer at the Observatory and at the Peak, the latter being the mean of the 10a., 4p., and 10p. observations, and the excess of the hourly values above the mean.

The height of the barometer undergoes daily a double variation, which is so regular, that it may be perceived even during considerable disturbances, the approaches of which are indicated beforehand by irregularities in the variation, and the heights of the barometer observed during the raging of a typhoon must be freed from the diurnal variation, if the progress of the disturbance is to be properly understood.

At 4a. the barometer begins to rise. It is at the time comparatively lower in spring, when the atmosphere is saturated with moisture, than later in the year. It attains its mean height about 6a., perhaps a little later in spring than in autumn and winter. At 10a., the height attains its forenoon maximum, which is in Hongkong the principal maximum except perhaps in June and July. The barometer stands comparatively highest at 10a. in mid-winter. After 10a. it begins to fall and attains again its average value about 1p. in spring but shortly after noon about the latter end of the year. It reaches its second minimum between 4p. and 5p. in spring but already about 3p. in winter. At all seasons of the year this is the absolute minimum but comparatively lowest in winter. Thereafter it rises and reaches its third average shortly before 8p. The second maximum occurs about 10p. but perhaps later in spring than in winter. This was comparatively highest in July. Then the barometer falls till about 3a. in spring and about 4a. in winter, when it attains its forenoon minimum, but this was about three times as low in spring as in December. In fact in mid-winter the mean height of the barometer is, considering the low latitude, remarkably constant during the night, which must be caused by the extreme dryness of the air and the comparatively great range of temperature.

The diurnal range in the different months came out as follows: Jan. 0.101, Feb. 0.109, Mar. 0.106, April 0.084, May 0.079, June 0.068, July 0.061, Aug. 0.076, Sep. 0.072, Oct. 0.083, Nov. 0.097, Dec. 0.114.

The annual variation of the height of the barometer is due to the seasonal heating and cooling of the interior of Asia, which causes also the monsoons. This is clearly exhibited in the following table, the first column of which shews the mean height of the barometer at the Observatory reduced to 32° and to mean sea level. The second column shews the mean excess of the barometer in Shanghai over Hongkong, the distance between these stations being about 670 miles. The third column shews the mean excess of the barometer in Hongkong over Manila, the distance being about 600 miles. The data in the two last columns have been derived from the telegraphic reports for 10a. :—

1884			
January,	30.211	+0.092	+0.149
February,	30.181	0.107	0.124
March,	30.027	0.081	0.043
April,	29.985	0.047	+0.016
May,	29.866	0.022	−0.016
June,	29.775	0.032	0.096
July,	29.694	0.029	0.074
August,	29.738	0.010	0.087
September,	29.798	0.081	−0.048
October,	30.034	0.084	+0.117
November,	30.113	0.138	0.203
December,	30.238	+0.114	+0.260
Year,	29.972	+0.070	+0.049

The monthly range of the barometer has been computed from the 10a. and 4p. telegraphic reports (taking the mean of the two results) received from different stations the latitudes of which are as follows :—

Manila 14° 36′, Amoy 24° 27′, Shanghai 31° 15′, Nagasaki 32° 45′, Wladivostock 43° 7′.

MONTHLY BAROMETRIC RANGE.

Year.	*Month.*	*Manila.*	*Amoy.*	*Shanghai.*	*Nagasaki.*	*Wladivostock.*
1884	February,	.170	.435	.475	.720	.915
„	March,	.195	.400	.560	.650	.895
„	April,	.180	.430	.530	.630	.820
„	May,	.170	.320	.425	.595	.905
„	June,	.185	.290	.365	.495	.600
„	July,	.365	.510	.325	.415	.765
„	August,	.475	.455	.355	.800	.445
„	September,	.280	.470	.380	.370	.490
„	October,	.175	.310	.495	.410	.785
„	November,	.500	.365	.470	.480	.610
„	December,	.245	.285	.465	.540	.685
1885	January,	.185	.315	.395	.455	.710

In the north, where storms prevail during the winter, the range is greatest at that season. In the south it is greatest during the summer, — the typhoon — season.

The barometric range and the average force of the wind have been computed in a similar manner from registers received from other stations. Observations made during November and December 1884, and January 1885, were used and the results are exhibited in the following table :—

Station.	*Monthly Barometric Range.*	*Average Force of Wind.*
Manila,	0.21	1.3
Kiungchow,	.25	2.5
Pakhoi,	.28	3.2
Canton,	.27	2.3
Takau,	.26	3.8
Anping,	.22	...
Fisher Island, Lh.,	.23	3.9
Breaker Point, Lh.,	.25	4.1
Lamocks, Lh.,	.21	4.5
Swatow,	.27	1.6
Amoy,	.29	1.7
Ocksen, Lh.,	.21	5.2
Turnabout, Lh.,	.23	4.8
Middle Dog, Lh.,	.30	4.2
Foochow,	0.35	1.4
Ningpo,	.39	1.7
Kiukiang,	.42	2.5
Steep Island, Lh.,	.42	4.9
Shaweishan, Lh.,	.39	3.5
Gutzlaff, Lh.,	.40	3.9
North Saddle, Lh.,	.45	4.6
Wuhu,	.43	1.5
Chinkiang,	.60	2.3
Ichang,	.51	...
Chefoo,	.58	2.6
Shantung Prom., Lh.,	.52	4.8
Taku,	.58	...
Wladivostock,	.67	2.3

At the lighthouses (marked Lh.) the force of the wind is greater than along the coast or at inland stations. But it should be remembered, that the stations along the coast are generally in a more or less sheltered position.

The barometric range increases with the latitude, — roughly speaking with the sinus of the latitude or perhaps more rapidly. This illustrates the fact, that a certain change in the barometer indicates much stronger wind in a southern than in a northern latitude:—

Latitude.	*Monthly Barometric Range.*	*Force of Wind.*
15°	0.215	1.3
21°	.266	2.8
23°	.244	3.4
25°	.276	3.5
31°	.446	3.1
38°	.560	3.7
43°	.668	2.3

Table II shows the average temperature in degrees Fahrenheit at the Observatory and at the Peak, the latter being the mean of the 10 a. and 10 p. temperature, and the excess of the hourly values above the mean. The daily variation was remarkably constant throughout the year, except in December when it was greater owing to the clearness of the sky and the dryness of the air. The hottest part of the day falls about 2 p. in winter and about 3 p. in summer. The greatest cold fell about 6 a.

Table III shows the relative humidity in percentage of saturation at the Observatory and at the Peak, the latter being the mean of the 10 a. and 10 p. values, and the excess of the hourly values above the mean. The daily variation was remarkably constant except in December, when it was much greater than during the previous months. The air is farthest from saturation and therefore feels driest about 3 p. and nearest saturation between 4 a. and 6 a. when it feels dampest. The average relative humidity is registered between 8 a. and 9 a. and also about 7 p.

Table IV contains the tension of aqueous vapour expressed in inches of mercury at the Observatory and at the Peak, the latter being the mean of observations at 10 a., 4 p., and 10 p. The daily variation, as was to be expected from a coast station, is small, but there is less water vapour suspended in the air in the morning than in the evening. Only in December, when the weather was very dry, did the daily variation amount to any noteworthy proportion. The decrease of aqueous vapour with increasing height is smaller than that indicated by HANN's formula, especially in winter when the clouds are low, but during the SW monsoon, when the clouds are higher, the decrease agrees better with the formula.

The vapour tension has a gradual annual variation, which is perhaps even greater than in Calcutta. Its maximum fell in July, and its minimum in December, but it may be seen from Table III, that the air appears to be dampest in March, because then the air is almost saturated with water vapour, and any decrease of temperature of the air, or of any object with which it comes in contact, causes a part of the vapour to be precipitated in the form of dew.

Both the relative humidity and the vapour tension were calculated by the aid of BLANFORD's tables.

Table V exhibits the total number of hours of sunshine registered. There was more sunshine during the afternoon than during the forenoon. The amount increased and reached its maximum in December, although then of course the possible duration is a minimum. The actual minimum of sunshine occured in March and the change from maximum to minimum is abrupt.

Table VI exhibits the velocity of the wind expressed in miles per hour and the excess of the hourly values above the mean. The velocity at the Peak has been calculated from the force estimated there at 10 a., 4 p., and 10 p. The usual daily variation of the velocity of the wind with its maximum about mid-day is seen at a glance, and the variation appears to be greater in summer than in winter. During the first months of the year there appeared to be a maximum in the early morning hours, as pointed out in the monthly weather reports.—The annual variation of the velocity of the wind is also great. The wind is stronger in winter than in summer. The velocity of the wind at the Peak, even taking into consideration that it is observed principally during the day, is much greater than near sea level, and the annual variation is not so well marked. The secondary minimum of wind force in May so well known to mariners, and also shown by the sea disturbance in Table XIII, is scarcely noticed at the Peak. But different questions arising from this comparison will scarcely be answered till a self-recording anemometer is erected at the Peak.

Table VII shows the mean direction of the wind at the Observatory and at the Peak. On an average the direction is a point more southerly at the Peak. The excess of the hourly direction above the mean, expressed in degrees, has been counted from North through East towards South. The veering of the wind during the day is scarcely remarked except during the southerly monsoon, and only in August was it prominent.—Already DAMPIER pointed out the comparative absence of land and sea breezes on east-coasts, but KÖPPEN has lately propounded an hypothesis, according to which the increase and the veering of the wind during the hottest part of the day should be caused by the descent of the colder air from above, the velocity of which is greater and the direction of which is seen to be more southerly.

Table VIII shows the total distance traversed by, as well as duration and average velocity of winds from bi-quadrantal points. The velocity is a maximum for E winds during which the trade and the monsoon blow together, and which also preponderate while typhoons are passing across the China Sea south of Hongkong, but there is a secondary maximum for SW winds, whose duration is however nearly a minimum.

Table IX shows particulars concerning the rainfall. It is plain, that the observers on Stone Cutter's Island and at the Peak neglect to measure the rain every day.

Table X contains particulars concerning different phenomena. Fog is at sea level noted only in spring. It is of course common at a higher level. Electric phenomena are most frequent in August, but most thunderstorms passed over the Colony in May. Some damage to property was caused by them. Unusual visibility of distant objects was most common in summer, when the air is moist and at the same time fog absent. Rainbows, which are so common in Great Britain and Ireland, are rarely seen here. The maximum frequency of halos coincides with the maximum frequency of typhoons.

Table XI shows the frequency of clouds of different forms. During January cum, and R-cum. prevail. In February R-cum and nim prevail. In March cum-nim is the usual cloud. In April cum again prevails and holds the ground till next February.—C, c-str and c-cum reach their maximum in the typhoon season, the latter form of cloud already in July.—Sm-cum are common during the last half year.

In January the lower clouds came from E, and the direction veered with increasing height, the highest clouds coming from W. In February the lower clouds came from E but occasionally also from W or SW, the highest from W. In March and April the lower clouds came from SE, and the direction veered with increasing height, the highest clouds coming from W. In May the lower clouds came partly from E and partly from SW, the highest from W. In June the lower clouds came from SE by E and the highest from WSW. In July the lower clouds came from SSE. The average direction of the higher clouds was then perhaps about NE, but their direction whence coming is evidently dependent upon typhoons. In August the lower clouds came generally from the portion of the compass between W, S and NE and the upper from the portion between WNW, N and SE. In September no average direction could be made out. It depends upon the typhoons. In October the lower clouds came from E and the highest from W. In November the lower came from E and the highest from different directions. In December the average directions could not be ascertained beyond doubt. It appears the lower clouds came from NE and the higher from SW or thereabout.

Clouds less than 2,000 feet above sea level were observed in January on 10 days, in February on 13 days, in March on 23 days, in April on 20 days, in May on 20 days, in June on 18 days, in July on 4 days, in August on 8 days, in September on 5 days, in October on 4 days, in November on 8 days and never in December. They were below 1,000 feet on one day in January, on 2 days in February, on 9 days in March, on 6 days in April and on one day in May.

Table XII shows the cloudiness, which is greater in the forenoon than in the afternoon, as appeared also from the sunshine-records. It reached its maximum in March, during which the sky was almost continuously overcast, and decreased then slowly till the minimum in December. In January the cloudiness increases abruptly.

Table XIII shows the sea-disturbance (0-9), which is greatest in November and December and least in summer.

Table XIV shows the mean readings of the solar radiation maximum thermometers, which were carefully compared in January and have been reduced to the standard kept at Kew. The mean maximum is recorded at the Observatory in July but at the Peak in August and September. The excess of these readings over the respective mean maxima of air temperature are also exhibited. These figures, although they do not embody any definite measure of solar radiation, are perhaps for want of anything better useful for comparison with other places in the world. At the Observatory they are highest in July and at the Peak in December. The prevalence of fog at the latter station during parts of the year is evidently the cause of the general defect of radiation there, while the excess over the Observatory in December may perhaps prove to be real.

The same table shews the excess of the minimum air temperature above the minimum thermometer placed one inch above the ground. At the Observatory the ground was not turfed till August. The terrestrial radiation during the night reached a maximum in December. In spring and early summer the radiation thermometer at the Peak did not register lower than the temperature of the air, owing no doubt to the fog. But those figures do not exhibit a correct measure of the terrestrial radiation, as little as the figures referring to solar radiation, as the grass minimum gets wet from fog and rain and thus reads lower than the correct radiation temperature.

The same table exhibits the average height in feet to which one must ascend in order to have the mean temperature decreased one degree Fahrenheit. The figures have been computed from the mean temperatures in Table II, whereas in the monthly weather reports observations at Cape d'Aguilar were also taken into account. The decrease of temperature with increasing height exhibits an annual variation. It was a minimum in March, when the lower level of the clouds lay below the Peak, and a maximum in June.

TABLE I.

Mean Height of the Barometer at the Observatory and at the Peak for each month in the Year 1884, and Mean Diurnal Variation at the Observatory.

Month.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Mean. Observatory.	Mean. Peak.
January,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	30.093	28.302
February,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	30.061	28.244
March,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	29.909	...
April,	.002	—.013	—.027	—.026	—.021	—.005	.011	.028	.041	.044	.036	.022	—.001	—.018	—.032	—.040	—.039	—.029	—.016	.002	.018	.027	.021	.016	29.868	...
May,	—.003	—.011	—.021	—.020	—.017	—.005	.011	.028	.034	.039	.033	.022	.001	—.013	—.028	—.035	—.040	—.028	—.017	.002	.013	.024	.020	.008	29.752	28.038
June,	.004	—.005	—.014	—.016	—.012	.002	.010	.021	.024	.027	.025	.015	—.003	—.014	—.028	—.041	—.040	—.030	—.017	.003	.016	.026	.023	.014	29.662	27.965
July,	—.001	—.008	—.016	—.018	—.014	—.004	.004	.017	.024	.026	.023	.013	.001	—.010	—.023	—.032	—.035	—.029	—.016	.002	.017	.029	.026	.018	29.581	27.893
August,	.007	—.002	—.010	—.010	—.006	.002	.012	.023	.030	.033	.027	.014	—.005	—.021	—.034	—.042	—.043	—.036	—.021	.000	.016	.026	.023	.018	29.625	27.937
September,	—.007	—.015	—.022	—.019	—.012	.001	.013	.028	.036	.038	.031	.018	—.003	—.020	—.032	—.034	—.032	—.024	—.014	.004	.018	.025	.020	.010	29.685	27.993
October,	—.002	—.012	—.020	—.020	—.014	.003	.018	.033	.044	.042	.032	.014	—.009	—.028	—.039	—.039	—.035	—.026	—.012	.009	.019	.021	.016	.010	29.920	28.198
November,	—.002	—.011	—.018	—.019	—.015	.002	.019	.037	.049	.049	.032	.009	—.022	—.039	—.046	—.047	—.036	—.022	—.006	.012	.018	.022	.019	.013	29.996	28.228
December,	.010	.003	—.006	—.009	—.007	.006	.021	.038	.054	.056	.037	.005	—.030	—.049	—.058	—.055	—.043	—.028	—.010	.005	.014	.019	.016	.015	30.119	28.323
Means,	.001	—.008	—.017	—.017	—.013	.000	.013	.028	.037	.039	.031	.015	—.008	—.024	—.036	—.041	—.038	—.028	—.014	.004	.017	.024	.020	.014	29.856	28.112

TABLE II.

Mean Temperature at the Observatory and at the Peak for each Month in the Year 1884, and Mean Diurnal Variation at the Observatory.

Month.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Mean. Observatory.	Mean. Peak.
January,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	62.3	55.4
February,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	57.0	50.8
March,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	62.3	58.3
April,	—1.5	—1.8	—1.9	—2.1	—2.0	—2.0	—1.5	—0.7	0.2	1.1	1.6	2.2	3.1	3.0	3.1	2.3	1.5	0.2	—0.3	—0.6	—1.0	—1.1	—1.3	—1.4	67.8	62.6
May,	—2.1	—2.1	—2.2	—2.3	—2.2	—2.1	—1.3	—0.3	0.7	1.7	2.6	3.5	4.0	3.8	3.7	2.8	1.7	0.1	—1.0	—1.4	—1.7	—1.8	—2.0	—2.0	74.8	68.4
June,	—2.1	—2.2	—2.3	—2.4	—2.4	—2.5	—1.8	—1.0	—0.2	0.9	1.7	2.9	3.8	3.8	3.8	3.5	2.3	0.7	—0.6	—1.2	—1.4	—2.1	—1.5	—1.6	80.1	72.4
July,	—1.8	—2.0	—2.1	—2.2	—2.4	—2.4	—1.5	—0.5	0.4	1.2	2.0	2.0	2.8	3.4	3.8	3.4	2.4	1.1	—0.2	—0.8	—1.1	—1.4	—1.6	—1.8	82.2	74.7
August,	—2.2	—2.5	—2.8	—3.0	—3.2	—3.4	—2.4	—1.2	0.0	1.0	1.5	2.1	3.6	4.2	4.7	4.5	3.6	1.8	0.4	—0.3	—1.0	—1.4	—1.7	—2.0	81.8	74.6
September,	—1.9	—2.3	—2.6	—2.9	—3.0	—3.1	—2.4	—1.1	0.0	0.9	1.7	2.1	3.4	3.7	4.1	3.9	2.9	1.0	0.0	—0.5	—0.8	—1.0	—1.2	—1.6	81.2	73.9
October,	—1.6	—1.9	—2.0	—2.3	—2.5	—2.7	—2.1	—1.1	0.1	1.3	2.2	3.0	3.7	3.8	3.7	2.9	1.8	0.2	—0.3	—0.5	—0.7	—1.0	—1.3	—1.6	77.2	70.0
November,	—1.3	—1.5	—1.7	—2.1	—2.4	—2.7	—2.4	—1.3	0.0	1.1	1.9	2.5	3.2	3.3	3.2	2.5	1.4	0.4	0.0	—0.3	—0.8	—0.9	—1.3	—1.5	67.8	60.9
December,	—2.0	—2.3	—2.7	—3.1	—3.4	—3.6	—3.5	—2.4	—0.6	1.1	2.9	4.1	5.2	5.5	5.1	4.1	2.4	0.8	0.1	—0.6	—1.1	—1.5	—1.8	—2.1	59.6	53.3
Means,	—1.8	—2.1	—2.3	—2.5	—2.6	—2.7	—2.1	—1.1	0.1	1.1	2.0	2.7	3.6	3.8	3.9	3.3	2.2	0.7	—0.2	—0.7	—1.1	—1.4	—1.5	—1.7	71.2	64.6

TABLE III.

Mean Humidity at the Observatory and at the Peak for each month in the Year 1884, and Mean Diurnal Variation at the Observatory.

Month.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Mean. Observ-atory.	Mean. Peak.
January,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	78	89
February,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	79	88
March,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	91	96
April,	4	6	6	6	6	6	4	2	0	—3	—4	— 6	— 7	— 7	— 8	— 6	—4	—1	1	2	3	3	4	5	86	95
May,	5	5	5	5	4	4	3	1	—1	—3	—5	— 7	— 9	— 9	— 9	— 6	—3	0	2	4	4	4	4	4	85	94
June,	5	5	5	6	6	6	4	2	0	—4	—4	— 6	— 8	— 9	— 9	—10	—7	—4	0	3	4	4	4	4	83	95
July,	5	4	5	5	5	5	2	0	—2	—5	—6	— 6	— 7	— 7	— 9	— 8	—6	—3	1	2	4	4	4	4	83	94
August,	5	6	7	7	7	8	6	3	—1	—4	—5	— 6	— 9	—10	—11	—11	—9	—5	—1	2	3	4	5	5	82	93
September,	4	5	5	6	6	6	5	1	—2	—5	—5	— 7	— 8	— 9	— 9	— 8	—5	—1	1	3	3	3	4	4	76	88
October,	5	5	5	5	5	5	3	0	—3	—5	—7	— 9	—10	— 9	— 8	— 7	—4	0	1	1	3	3	5	5	74	86
November,	4	4	4	4	4	4	3	0	—1	—4	—5	— 7	— 6	— 6	— 6	— 7	—4	—1	0	1	3	3	4	5	68	80
December,	7	7	7	8	7	7	6	2	—4	—8	—9	—12	—15	—14	—12	— 9	—6	—2	1	3	5	7	8	8	62	74
Means,	4.9	5.2	5.4	5.8	5.6	5.7	4.0	1.2	—1.6	—4.6	—5.6	—7.3	—8.8	—8.9	—9.0	—8.0	—5.3	—1.9	0.7	2.3	3.6	3.9	4.7	4.9	78.9	89.3

TABLE IV.

Mean Tension of Aqueous Vapour at the Observatory and at the Peak for each month in the Year 1884, and Mean Diurnal Variation at the Observatory.

Month.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Mean. Observ-atory.	Mean. Peak.
January,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.443	0.404
February,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.377	0.337
March,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.519	0.486
April,	—.005	—.001	.000	—.004	—.005	—.005	—.005	.001	.003	.002	.006	.004	.006	.009	.003	.000	—.001	—.007	—.004	.000	.002	.003	.008	.004	0.594	0.548
May,	—.010	—.010	—.012	—.015	—.017	—.014	—.001	.001	.003	.013	.018	.022	.018	.014	.011	.012	.010	.000	—.005	.001	—.005	—.007	—.012	—.012	0.736	0.662
June,	—.006	—.009	—.007	—.006	—.002	—.009	—.007	—.008	—.002	—.004	.011	.018	.019	.014	.009	.000	—.009	—.014	—.008	—.002	.005	.008	.002	—.001	0.850	0.767
July,	.003	—.009	—.007	—.006	—.013	—.016	—.016	—.011	—.006	—.012	.005	.005	.013	.018	.012	.009	.009	.008	.007	.002	.011	.002	.004	—.003	0.908	0.816
August,	—.005	—.010	—.006	—.008	—.018	—.015	—.003	—.001	—.009	—.013	—.002	—.001	.005	.016	.015	.008	.005	.003	.000	.014	.005	.006	.002	.001	0.886	0.802
September,	—.004	—.007	—.011	—.015	—.014	—.013	—.010	—.011	—.016	—.029	—.010	—.011	.006	—.002	.010	.013	.018	.013	.018	.024	.019	.014	.013	.001	0.811	0.741
October,	.012	.008	.002	—.003	—.008	—.017	—.017	—.019	—.017	—.016	—.016	—.011	—.001	.002	.004	.006	.009	.011	.009	.008	.015	.015	.019	.018	0.698	0.634
November,	.012	.006	.002	—.003	—.011	—.017	—.015	—.014	—.008	—.007	—.001	—.003	.008	.007	.008	—.006	—.004	—.001	.001	.005	.012	.011	.012	.012	0.490	0.457
December,	.016	.012	.006	.006	.001	—.001	—.008	—.012	—.021	—.025	—.015	—.020	—.023	—.016	—.010	—.003	.003	.004	.011	.014	.018	.020	.022	.017	0.318	0.281
Means,	.001	—.002	—.004	—.006	—.010	—.012	—.009	—.008	—.008	—.010	.000	.000	.006	.007	.007	.004	.004	.002	.003	.007	.009	.008	.007	.004	0.636	0.578

TABLE V.

Total Hourly Duration of Sun-shine for each Month in the Year 1884, and Total Monthly Duration of Sun-shine.

Month.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	Total in each Month.
January, *.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
February, *.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
March, ...	...	0.3	1.8	1.7	4.8	6.6	8.4	9.1	11.2	9.7	5.9	1.0	...	60.5
April, ...	...	2.8	4.4	6.4	6.7	8.3	8.2	10.8	9.2	9.5	8.0	5.1	0.3	79.7
May, ...	...	3.1	5.2	5.7	9.3	11.3	12.7	11.8	11.7	10.7	8.8	7.7	1.1	99.1
June, ...	1.6	8.0	10.7	12.4	12.1	14.5	13.0	15.4	16.0	16.0	14.2	12.0	3.3	149.2
July, ...	1.9	14.3	16.9	15.7	17.5	18.7	15.3	18.1	16.2	17.0	16.3	13.0	3.6	184.5
August, ...	1.1	13.6	17.4	20.6	20.6	19.4	18.6	20.0	19.0	17.3	19.1	15.1	4.5	206.3
September, ...	0.1	15.3	22.1	22.7	23.8	21.9	22.5	24.1	24.4	22.4	22.7	16.1	...	238.1
October, ...	...	10.1	21.3	24.5	26.3	26.0	24.7	25.5	24.9	23.6	21.2	10.8	...	238.9
November, ...	...	6.2	16.4	18.9	18.8	18.7	18.9	19.5	19.3	18.7	17.2	4.5	...	177.1
December, ...	...	3.1	22.6	23.7	27.6	27.1	28.1	29.3	28.2	26.8	24.9	3.9	...	245.3
Sums,.....	4.7	76.8	138.8	152.3	167.5	172.5	170.4	183.6	180.1	171.7	158.3	89.2	12.8	1678.7

* Record not yet commenced.

TABLE VI.

Mean Hourly Velocity of the Wind at the Observatory and at the Peak for each Month in the Year 1884, and Mean Diurnal Variation at the Observatory.

Month.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Mean. Observatory.	Mean. Peak.
January,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	18.1	23
February,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	18.5	24
March,	—0.4	0.0	1.8	1.5	1.1	1.7	2.1	2.7	0.9	—0.6	2.3	0.7	1.0	0.5	—0.2	—0.5	—2.3	—2.1	—2.4	—2.4	—1.7	—2.1	—1.7	—1.1	19.2	22.5
April,	—1.6	—2.8	—2.9	—2.8	—2.6	—1.4	—1.5	0.5	1.3	1.3	3.1	2.7	2.9	2.5	2.4	1.6	0.0	0.1	—0.9	—1.1	—0.2	—0.1	—0.3	—1.4	16.5	23
May,	—1.2	—1.5	—1.4	—1.3	—1.4	—2.0	—2.0	—1.8	—0.4	0.2	1.7	3.3	3.0	4.0	2.5	1.1	0.6	0.2	—0.3	—0.9	0.2	0.0	—0.4	—1.3	12.9	22.5
June,	—2.5	—2.9	—1.8	—2.0	—2.1	—1.9	—1.9	—0.1	0.4	1.6	3.5	4.0	3.8	3.3	3.1	2.7	2.0	0.4	—0.8	—1.6	—2.9	—2.4	—1.5	—2.3	14.7	23
July,	—1.0	—1.2	—0.8	—0.7	—0.0	—0.3	—1.2	—1.0	—1.0	0.1	2.2	2.4	2.1	2.4	2.2	0.9	0.4	—0.8	—1.0	—1.2	—0.9	—0.9	—0.2	—1.4	14.3	22
August,	—1.9	—1.3	—0.8	—0.9	—1.5	—2.0	—1.4	—0.7	0.4	0.8	2.8	3.0	2.8	2.8	3.3	3.1	1.4	1.0	—1.2	—1.6	—1.2	—1.9	—2.0	—2.4	7.0	19
September,	—0.4	0.1	—0.1	—0.6	—1.9	—2.5	—2.0	—0.9	—0.1	1.7	4.0	2.3	2.9	3.6	2.4	1.1	0.7	—1.1	—2.1	—2.8	—2.3	—1.6	—0.9	—0.4	13.2	20.5
October,	—0.2	—0.1	0.3	—1.1	—1.5	—1.2	—0.9	0.4	1.5	1.8	2.6	2.1	3.0	2.6	2.0	1.0	—0.7	—2.4	—2.1	—2.2	—1.7	—1.4	—1.5	—1.0	15.1	23
November,	—0.1	—0.3	—0.1	0.2	1.3	0.4	—1.2	—1.5	—0.5	1.2	2.0	1.0	0.9	0.7	0.9	0.8	0.5	—1.3	—0.7	—1.0	—1.7	—0.8	—0.6	—0.6	15.8	24
December,	—0.2	—0.2	—0.5	—1.1	—1.7	—3.2	—3.8	—2.7	—1.4	—0.9	0.7	2.8	3.5	3.3	3.4	3.0	2.2	0.5	—0.8	—0.9	—1.1	—0.9	—0.2	—0.2	12.2	22
Means,	—1.0	—0.9	—0.6	—0.9	—1.0	—1.2	—1.4	—0.5	0.1	0.7	2.5	2.4	2.6	2.6	2.2	1.5	0.5	—0.5	—1.2	—1.6	—1.3	—1.2	—0.9	—1.2	14.8	22.4

TABLE VII.

Mean Direction of the Wind at the Observatory and at the Peak for each Month in the Year 1884, and Mean Diurnal Variation at the Observatory.

Month.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Mean. Observatory.	Mean. Peak.
January,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	E	E
February,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	ENE	ENE
March,	2°	— 1°	— 2°	0°	0°	— 2°	— 2°	— 2°	1°	— 1°	1°	0°	1°	0°	0°	1°	— 1°	2°	0°	0°	— 2°	— 1°	— 2°	0°	E 1° N	ESE
April,	— 2	0	— 6	— 2	— 5	— 4	— 2	— 2	— 2	4	2	3	5	5	3	3	0	3	0	— 1	4	3	2	— 2	E 2° N	ESE
May,	— 1	— 1	— 2	— 3	— 1	— 3	— 7	— 7	— 1	0	3	6	7	6	5	10	2	— 4	— 4	3	— 3	— 2	— 7	— 2	E 3° S	SE by E
June,	— 2	9	10	13	16	11	— 5	—11	— 9	0	3	— 1	— 1	0	— 2	— 1	4	0	— 2	—10	— 8	— 1	— 4	— 1	E 38° S	ESE
July,	8	14	9	20	12	1	— 4	—11	— 2	—16	— 6	8	3	6	12	3	— 2	— 2	— 6	— 7	— 7	—12	— 9	— 1	E 24° S	S by E
August,	—58	—68	—54	—63	— 6	18	3	—20	74	87	102	88	65	42	25	31	19	— 2	—19	—30	—51	—51	—49	—57	S 9° E	S
September,	— 6	4	3	13	1	1	—21	— 3	4	— 4	— 3	— 6	1	3	— 2	— 1	7	6	0	5	0	6	2	0	E 18° N	ENE
October,	— 8	— 8	—14	—15	—11	— 7	—13	— 9	— 6	— 1	6	11	9	12	13	11	12	12	0	— 1	— 3	— 4	1	0	E 8° N	E by N
November,	— 7	— 3	— 7	— 5	—15	—14	—10	— 6	4	4	3	7	12	13	11	7	8	4	— 3	— 2	— 2	— 2	— 6	— 2	E 30° N	ENE
December,	— 4	—14	— 8	— 5	—16	—16	—15	—12	— 9	— 1	10	15	14	14	12	9	9	3	1	— 5	2	3	4	6	E 25° N	ENE
Means,	— 8	— 7	— 7	— 5	— 2	— 1	— 8	— 9	5	7	12	13	12	10	8	7	6	2	— 3	— 7	— 7	— 6	— 7	— 6	E 3° S	E 14° S

TABLE VIII.

Total Distance traversed by, as well as Total Duration and Average Velocity of Winds from eight different points of the Compass during the Months, March to December, inclusive of 1884.

Wind.	Total Distance. Miles.	Duration. Hours.	Velocity. Miles per Hour.
N,	10015	740	13.5
NE,	7189	603	11.9
E,	63349	3542	17.9
SE,	6510	567	11.5
S,	5901	574	10.3
SW,	4627	374	12.4
W,	3391	393	8.6
NW,	2053	263	7.8
Calm,	202	288	0.7
Sums and Mean,	103237	7344	14.1

TABLE IX.

Total Rainfall, Duration of Rain and Number of Days, on which Rain was collected, at the Observatory, Stonecutters' Island and the Peak for each month of the year 1884.

Month.	Observatory.			Stonecutters' Island.		Victoria Peak.	
	Amount. *ins.*	Duration. *hrs.*	Days.	Amount. *ins.*	Days.	Amount. *ins.*	Days.
January,	0.000	17	0	0.00	0	0.10	1
February,	3.423	92	11	3.52	11	5.37	10
March,	5.827	50	10	5.56	9	5.45	9
April,	5.335	74	19	5.40	14	6.84	16
May,	8.965	77	20	8.38	15	11.02	14
June,	11.955	81	19	12.72	14	11.06	17
July,	12.155	81	21	13.90	18	14.00	16
August,	10.840	70	18	15.16	16	10.67	13
September,	12.345	49	11	12.28	12	9.53	8
October,	3.085	26	9	4.14	8	2.62	4
November,	1.495	33	7	0.90	3	2.34	6
December,	0.000	1	0	0.00	0	0.00	0
Year,	75.425	651	145	81.96	120	78.40	115

TABLE X.

Total Number of Days on which Different Meteorological Phenomena were noted and Total Number of Thunderstorms during each Month of the Year, 1884.

Month.	Fog.	Electric Phenomena.	Lightning.	Thunder.	Thunderstorms.	Unusual Visibility.	Dew.	Rainbows.	Lunar Halo.	Lunar Corona.	Solar Halo.
January, ...	0	0	0	0	0	0	1	1	0	0	0
February, ...	0	0	0	0	0	4	2	0	1	1	0
March, ...	5	7	7	6	4	3	2	0	0	0	0
April,.....	3	10	10	6	3	2	1	0	0	0	0
May, ...	0	10	10	7	6	5	6	0	2	3	0
June, ...	0	16	15	6	3	8	3	0	0	3	0
July, ...	0	21	21	10	4	6	2	2	1	0	0
August, ...	0	23	22	13	1	8	4	2	4	1	3
September, ...	0	19	19	7	1	2	8	3	1	0	0
October,.....	0	6	6	1	2	4	5	0	0	0	0
November, ...	0	0	0	0	0	6	5	0	0	0	0
December,.....	0	0	0	0	0	2	5	0	0	0	0
Sums, ...	8	112	110	56	24	50	43	8	8	8	3

TABLE XI.

Total Number of Times that Clouds of different forms were observed in each Month of the Year, 1884.

Month.	c.	c-str.	c-cum.	sm-cum.	cum.	c-um-str.	str.	R-cum.	cum-nim.	nim.
January,.....	1	0	17	4	41	0	9	33	7	10
February, ...	0	3	14	6	20	0	7	20	15	22
March, ...	0	0	6	0	21	0	11	26	33	22
April, ...	2	0	14	6	36	0	5	25	23	19
May, ...	1	5	20	5	57	16	11	14	19	20
June, ...	3	2	23	12	53	14	0	7	20	22
July, ...	3	11	37	8	59	9	3	8	12	25
August, ...	4	14	19	11	52	13	7	0	15	23
September, ...	3	23	30	9	48	6	3	3	11	21
October, ...	1	7	16	9	51	2	2	5	17	5
November, ...	0	1	7	13	24	0	18	9	19	15
December, ...	8	4	6	14	15	0	7	4	3	2
Sums, ...	21	70	209	97	477	60	83	154	194	206

TABLE XII.

Mean Percentage of Clouded Sky in each Month of the Year 1884.

Month.	4 a.	10 a.	4 p.	10 p.	Mean.
January,	67	65	54	64	62
February,	66	71	73	60	67
March,	80	95	88	86	87
April,	81	87	83	81	83
May,	79	83	84	75	80
June,	63	76	72	74	71
July,	44	75	70	62	63
August,	57	63	61	50	58
September,	34	48	51	38	43
October,	33	40	41	40	38
November,	58	50	51	50	52
December,	32	21	20	33	26
Year,	58	64.5	62	59	61

TABLE XIII.

Mean Sea-disturbance in each Month of the Year 1884.

Month.	4 a.	10 a.	4 p.	10 p.	Mean.
January,	3.4	3.5	3.3	3.3	3.4
February,	3.6	3.8	3.4	3.4	3.55
March,	3.7	3.8	3.5	3.3	3.6
April,	2.9	3.0	2.8	2.9	2.9
May,	1.9	2.1	2.0	2.2	2.05
June,	2.4	2.6	2.6	2.5	2.5
July,	2.2	2.3	2.1	2.3	2.2
August,	2.6	2.6	2.5	2.6	2.6
September,	2.4	2.5	2.5	2.6	2.5
October,	4.1	4.1	3.9	3.9	4.0
November,	4.2	4.2	4.0	4.1	4.1
December,	4.1	4.2	4.0	4.1	4.1
Year,	3.1	3.2	3.05	3.1	3.1

TABLE XIV.

Average Readings of Solar Radiation Thermometers and Excess over Maximum Thermometers as well as Excess of Minimum over Terrestrial Radiation Thermometers at the Observatory and at the Peak, and average height at which the Temperature of the air is 1° lower during 1884.

Month.	Solar Radiation Thermometer.		Solar Radiation. Excess over Maximum.		Terrestrial Radiation.		Height of 1° Decrease.
	Observatory.	Peak.	Observatory.	Peak.	Observatory.	Peak.	
1884.							feet.
January, ...	.....	.....	.....	.....	.....	.....	248
February, ...	118.3	106.6	56.9	52.2	+1.5	+3.1	276
March, ...	120.5	108.9	54.7	47.4	0.6	+0.4	428
April, ...	124.7	111.3	52.1	45.3	1.7	+0.2	329
May, ...	138.8	121.4	58.2	50.0	1.3	—0.2	267
June, ...	143.3	122.5	57.3	48.0	1.9	0.0	222
July, ...	147.0	131.1	59.0	53.7	2.4	+0.3	228
August, ...	143.8	134.9	55.9	57.6	2.7	+0.8	238
September, ...	142.8	134.9	56.2	57.9	4.4	+1.1	234
October, ...	140.3	130.8	58.3	57.8	5.3	+0.6	238
November, ...	127.7	118.0	55.3	53.2	4.3	+1.1	248
December, ...	124.3	118.7	58.7	60.3	+6.0	+1.9	271
Mean, ...	133.8	121.7	56.6	53.0	+2.9	+0.8	259

W. Doberck,
Government Astronomer.

Hongkong Observatory, 17th February, 1885.

FIVE-DAY MEANS OF THE PRINCIPAL METEOROLOGICAL ELEMENTS FOR 1884.

The following five-day means have been constructed according to the recommendations of the International Meteorological Congress.

Being leap year the period February 25,—March 1, comprises six days.

Hongkong Observatory: The first column exhibits the height of the barometer in inches reduced to 32° Fahrenheit but not to sea level. The cistern is 110 feet above mean sea level. The means have been derived from the hourly readings except those for the first three months, which are derived from tri-diurnal observations, and have been reduced to the mean of twenty-four hours.

The second column exhibits the temperature in degrees Fahrenheit as derived from the hourly readings except those for the first three months, which are derived from observations made in STEVENSON'S screen at 10 a. and 10 p.

The third column exhibits the relative humidity derived from the hourly readings except those for the first three months, which are derived from tri-diurnal observations reduced to the mean of twenty-four hours.

The fourth column exhibits the vapour tension in inches derived from the hourly readings except those for the first three months, which are derived from tri-diurnal observations.

The fifth column exhibits the velocity of the wind in miles per hour derived from the hourly readings except those for the first two months, which are derived from velocities estimated every six hours.

The sixth column exhibits the percentage of the whole sky, that was covered by clouds, from observations made every six hours.

The seventh column exhibits the average daily number of hours in which the sun shone.

The eighth column exhibits the average amount of rain in inches that fell in one day, as derived from the hourly readings.

Victoria Peak: The first column exhibits the height of the barometer in inches reduced to 32° Fahrenheit but not to sea level as derived from tri-diurnal observations. The cistern is 1821 feet above mean sea level.

The second column exhibits the temperature as derived from observations made at 10 a. and 10 p.

The third column exhibits the relative humidity from tri-diurnal observations reduced to the mean of twenty-four hours.

The fourth column exhibits the vapour tension as derived from tri-diurnal observations.

The fifth column exhibits the force of the wind (0-12) from tri-diurnal observations.

The sixth column exhibits the average amount of rain in inches, that fell in one day as measured at 10 a.

HONGKONG OBSERVATORY.

Five-Day Periods.	Barometer.	Temperature.	Humidity.	Vapour Tension.	Wind Velocity.	Nebulosity.	Sunshine.	Rain.
January 1– 5	30.071	63.0	79	0.453	19.0	75	Record not yet commenced.	...
„ 6–10	.224	58.1	63	.315	14.0	42		...
„ 11–15	.094	63.3	78	.442	21.0	72		...
„ 16–20	.139	60.9	77	.410	18.5	44		...
„ 21–25	30.065	63.3	84	.492	18.5	78		...
„ 26–30	29.972	64.8	87	.528	17.0	70		...
February 31– 4	30.002	57.6	83	.402	23.5	77		0.255
„ 5– 9	.086	51.5	69	.270	14.0	61		0.029
„ 10–14	.050	56.0	89	.392	17.5	91		0.318
„ 15–19	.004	59.3	93	.468	22.0	96		0.081
„ 20–24	.168	58.6	71	.358	14.5	52		0.001
„ 25– 1	30.041	60.6	76	.417	20.0	84		...
March 2– 6	29.892	60.9	92	.501	19.1	73	4.7	...
„ 7–11	.998	60.5	84	.440	18.2	98	1.0	0.403
„ 12–16	.948	61.8	94	.522	21.3	89	1.7	0.017
„ 17–21	.901	61.6	95	.530	15.7	83	0.5	0.299
„ 22–26	.853	64.4	95	.583	19.5	79	1.1	0.285
„ 27–31	.855	64.2	88	.543	20.4	89	2.6	0.161
April 1– 5	.886	61.5	85	.467	17.3	93	0.6	0.244
„ 6–10	.901	66.0	90	.589	14.3	77	1.6	0.038
„ 11–15	.877	67.4	91	.610	16.9	79	2.2	0.334
„ 16–20	.875	68.2	82	.569	18.9	79	2.1	0.025
„ 21 25	.809	72.5	85	.678	12.5	56	6.4	0.149
„ 26–30	.860	71.0	84	.641	18.3	87	3.1	0.262
May 1– 5	.818	73.9	88	.742	14.5	71	5.9	0.564
„ 6–10	.722	75.2	89	.779	10.9	77	2.4	0.417
„ 11–15	.806	70.4	80	.602	11.3	87	2.0	0.263
„ 16–20	.794	75.3	86	.752	14.1	86	3.5	0.170
„ 21–25	.717	77.0	82	.765	17.7	82	3.1	0.042
„ 26–30	.671	76.3	87	.793	9.4	79	1.0	0.352
June 31– 4	.717	77.7	75	.712	15.4	87	9.4	...
„ 5– 9	.677	77.8	83	.790	18.9	77	4.5	0.150
„ 10–14	.667	79.7	86	.875	13.0	87	1.4	0.408
„ 15–19	.677	82.0	82	.893	19.0	83	4.2	0.395
„ 20–24	.687	79.9	86	.878	14.4	77	4.1	0.594
„ 25–29	.567	82.5	81	.896	7.2	54	7.8	0.143
„ 30– 4	.665	81.4	87	.927	8.9	86	2.2	1.142
July 5– 9	.648	81.5	82	.886	22.9	73	6.0	0.288
„ 10–14	.538	83.3	80	.910	10.0	54	6.6	0.024
„ 15–19	.556	83.6	80	.914	5.3	45	8.2	0.074
„ 20–24	.499	83.1	84	.952	10.1	61	5.3	1.233
„ 25–29	.565	81.1	83	.880	19.0	55	6.1	0.175
August 30– 3	.607	81.2	82	.866	19.1	55	7.7	0.199
„ 4– 8	.524	82.3	79	.874	5.0	43	7.9	0.040
„ 9–13	.587	82.7	81	.904	5.7	54	7.2	0.443
„ 14–18	.652	79.7	87	.884	7.5	82	2.4	0.918
„ 19–23	.611	83.5	77	.882	10.2	49	9.6	0.055
„ 24–28	.691	81.3	84	.895	7.7	67	5.7	0.585
September.....29– 2	.733	81.6	83	.888	5.6	47	7.0	0.125
„ 3– 7	.738	82.4	79	.881	4.1	29	9.7	0.003
„ 8–12	.442	80.8	79	.821	26.6	87	2.8	2.292
„ 13–17	.643	81.6	85	.919	7.4	43	8.6	0.026
„ 18–22	.708	81.8	66	.721	14.0	24	10.1	0.029
„ 23–27	.786	79.1	68	.683	11.7	39	7.1	0.102
October 28– 2	.820	79.7	81	.820	22.3	65	5.8	0.477
„ 3– 7	.839	80.5	83	.863	10.3	29	9.0	0.033
„ 8–12	.882	81.1	77	.819	18.8	30	9.8	0.038
„ 13–17	.957	75.8	69	.631	13.7	55	6.9	0.070
„ 18–22	.999	74.9	58	.510	12.7	20	8.5	...
„ 23–27	.995	73.4	68	.561	17.3	8	9.9	...
November 28– 1	.891	77.2	81	.757	11.5	68	5.3	0.015
„ 2– 6	.877	75.4	87	.764	15.6	68	4.0	0.262
„ 7–11	29.986	71.3	75	.580	19.6	68	5.2	...
„ 12–16	30.001	71.6	76	.592	17.0	78	3.5	0.014
„ 17–21	29.941	65.7	65	.433	16.9	74	4.0	0.023
„ 22–26	30.114	58.3	33	.166	14.7	9	9.5	...
December 27– 1	.107	61.5	63	.349	18.0	12	9.4	...
„ 2– 6	.170	62.7	67	.389	17.3	78	5.7	...
„ 7–11	.121	59.1	43	.219	9.8	9	8.8	...
„ 12–16	.162	59.0	58	.290	8.6	9	8.6	...
„ 17–21	.151	59.3	56	.287	11.5	31	7.3	...
„ 22–26	.046	58.9	70	.355	10.1	7	8.9	...
„ 27–31	30.065	57.9	68	.329	15.3	20	7.8	...

VICTORIA PEAK.

Five-Day Periods.	Barometer.	Temperature.	Humidity.	Vapour Tension.	Wind Force.	Rain.
January 1– 5	28.286	55.3	96	0.424	3.9	...
" 6–10	.423	50.7	74	.293	3.8	...
" 11–15	.303	56.1	88	.397	4.7	...
" 16–20	.340	53.8	88	.378	4.0	...
" 21–25	.280	56.6	95	.447	3.9	...
" 26–30	.203	59.4	93	.472	3.4	...
February 31– 4	.195	51.6	96	.371	4.8	0.42
" 5– 9	.247	44.1	82	.240	4.1	0.05
" 10–14	.235	49.2	98	.343	4.2	0.43
" 15–19	.213	54.7	100	.424	3.7	0.19
" 20–24	.345	52.1	78	.316	4.1	...
" 25– 1	.241	54.7	83	.365	4.1	...
March 2– 6	.114	56.7	96	.446	4.4	0.37
" 7–11	28.191	52.5	93	.378	4.3	0.03
" 12–16		58.4	99	.499	4.4	...
" 17–21		59.2	99	.502	3.5	0.33
" 22–26		63.0	99	.576	3.5	0.19
" 27–31		60.6	96	.526	4.5	0.17
April 1– 5		58.1	95	.471	4.4	0.21
" 6–10		61.4	99	.561	4.3	0.07
" 11–15		62.3	95	.543	3.5	0.24
" 16–20		61.4	91	.505	3.7	0.17
" 21–25	28.075	68.6	88	.624	4.2	0.06
" 26–30	.121	64.0	97	.586	4.1	0.31
May 1– 5	.114	68.1	94	.656	3.6	0.66
" 6–10	.024	69.2	96	.699	3.9	0.49
" 11–15	.076	63.6	94	.560	4.1	0.28
" 16–20	.079	69.1	98	.710	4.1	0.15
" 21–25	28.003	70.1	96	.720	4.7	0.12
" 26–30	27.968	69.9	94	.692	2.9	0.50
June 31– 4	28.005	69.8	85	.635	3.9	...
" 5– 9	27.966	69.4	98	.715	4.1	0.19
" 10–14	.977	72.6	98	.790	4.9	0.28
" 15–19	.981	73.8	98	.829	5.2	0.30
" 20–24	.996	73.4	97	.803	4.3	0.77
" 25–29	.876	74.7	90	.785	2.6	0.51
" 30– 4	.977	74.1	96	.816	3.7	0.56
July 5– 9	.955	73.9	94	.785	4.3	0.23
" 10–14	.857	75.5	93	.831	3.9	0.06
" 15–19	.875	75.7	92	.832	2.3	0.24
" 20–24	.824	75.6	96	.862	3.9	1.53
" 25–29	.878	74.4	92	.790	4.1	0.25
August 30– 3	.915	73.7	93	.775	3.5	0.09
" 4– 8	.847	75.1	90	.802	2.3	...
" 9–13	.906	74.9	92	.799	2.7	0.61
" 14–18	.963	72.9	96	.781	4.2	0.92
" 19–23	.930	76.0	89	.815	3.7	0.15
" 24–28	27.991	74.5	95	.817	3.6	0.37
September 29– 2	28.034	74.6	93	.812	2.8	0.08
" 3– 7	28.049	75.8	90	.811	1.9	0.08
" 8–12	27.773	73.7	89	.748	5.1	1.55
" 13–17	27.961	74.7	93	.807	2.7	0.21
" 18–22	28.004	73.8	79	.674	4.4	...
" 23–27	.077	71.9	82	.651	3.5	0.06
October 28– 2	.107	71.7	94	.723	4.5	0.40
" 3– 7	.143	73.5	94	.768	2.9	0.06
" 8–12	.174	73.5	89	.729	4.5	0.02
" 13–17	.223	69.0	84	.601	4.1	0.04
" 18–22	.260	67.5	70	.486	3.8	...
" 23–27	.246	66.5	77	.499	4.4	...
November 28– 1	.177	70.1	94	.697	2.9	...
" 2– 6	.160	69.4	96	.680	4.3	0.26
" 7–11	.225	64.0	90	.548	4.7	0.03
" 12–16	.236	63.9	88	.533	4.5	0.02
" 17–21	.160	59.2	79	.413	4.3	0.14
" 22–26	.303	51.5	50	.192	3.7	...
December 27– 1	.320	55.3	74	.322	3.7	...
" 2– 6	.372	55.9	83	.373	4.1	...
" 7–11	.322	52.7	54	.216	3.8	...
" 12–16	.361	54.8	54	.225	3.3	...
" 17–21	.351	51.7	61	.238	3.5	...
" 22–26	.253	53.2	71	.297	3.6	...
" 27–31	.267	50.9	81	.310	4.0	...

No record kept

Hongkong Observatory, 7th February, 1885.

W. DOBERCK,
Government Astronomer.

HONGKONG OBSERVATORY.

Weather Report for January, 1884.

In the *China Coast Meteorological Register*,—based on information transmitted by the Great Northern and the Eastern Extension Telegraph Companies,—which I have published daily, is given a summary of the atmospheric circumstances in Manila and along the Coast of China as far north as Shanghai.

At the beginning of the month the Barometer stood at about its mean height in these regions. It registered lowest in Manila, increasing towards NW., highest in Shanghai. Fresh NE. breezes indicated by the Gradients prevailed here. The sky was overcast but the atmosphere dry. The wind diminished in force up to the 4th when it died out, and the sky cleared, the Temperature and the Absolute Humidity at the same time reaching a Maximum. The Barometer was rising steadily up to the 8th, when it attained its Maximum, a light E. breeze continuing. The Barometer had not risen quite so much at the Eastern Stations, so that the Gradients then corresponded to N. Winds, which were registered here on the 8th and 9th, the Temperature and the Humidity at the same time falling to their Minima. On the 10th the Barometer began to fall, and the Temperature and Humidity to rise at all stations. The sky became overcast with the R-Cum. clouds characteristic of the season. Gradients for strong E. Winds were followed by a moderate ENE. gale on the 11th, which was not however, of long duration, as it went down to a dead calm with a partly clear sky next day. The following days light E. breezes prevailed. On the 15th the Barometer fell in Manila and rose to 30.4 in Shanghai, and the E. Wind increased to a moderate gale here. From the 16th to the 20th the Barometer here, and the Gradients in these regions, continued about the average accompanied by moderate E. breezes and great Relative Humidity with generally a clear sky. On the 18th the Barometer rose in the West and fell in the East. Gradients corresponded to N. Winds and the Humidity again decreased. Cold weather set in at Shanghai, where the Temperature had been hitherto comparatively high. On the 20th a moderate E. gale was felt here, the Barometer having continued to rise in Shanghai. Subsequently the Barometer continued to fall till the end of the month. The Temperature and Humidity increased, and the sky was generally overcast with Cum. or R-cum. clouds. Light or moderate E. breezes prevailed. The Temperature rose again in Shanghai on the 21st. The Barometer was then higher in the South than in the North, with light Winds from various directions along the Coast. But it rose again at Shanghai the 24th, and the E. Wind freshened but did not here exceed a fresh breeze (on the 27th). Subsequently atmospheric circumstances were about normal till the 31st, when the Barometer rose along the Coast and the E. Wind freshened with greater Relative Humidity.

The building of the Observatory was so far advanced by the 1st of January, that it was found possible to fix the Standard Barometer in the Instrument Room and to put up a Stephenson Screen, as well as stands for Radiation Thermometers, at a distance of about 75 feet SW. of the main building, but the Thermometers are placed over dry earth, as the levelled ground round the Observatory has not yet been turfed. The Barometer is placed 110 feet above Mean Sea Level, as determined by the Officers of the Surveyor General's Department. The bulbs of the Thermometers are about 109 feet above Mean Sea Level and 4 feet above the ground, except the Maximum Thermometer, which is a few inches higher, and the Terrestrial Radiation Thermometer, which is about one inch above the ground.

The Self-recording Instruments are not yet erected, as their places are not ready.—

The Lighthouse-keepers at Cape d'Aguilar and Green Island, as well as the Signal-man at Victoria Peak received in December last orders from Captain THOMSETT, R.N., Harbour Master, etc., to make Meteorological Observations according to my directions, from the 1st January, and I lost no time in giving them instructions and fitting up their Instruments.

At Victoria Peak, the Instruments, except the Radiation Thermometers, are placed in the Look-out. The Barometer is about 1823 feet above Sea Level. The bulbs of the Thermometers are about 4 feet above the floor, except the Maximum and the Terrestrial Radiation Thermometers, which are placed at the same height above the ground as at the Observatory.

At Cape d'Aguilar, the Thermometers are placed about 170 feet above Sea Level in a wooden screen 2 feet above the ground, except the Maximum Thermometer, which is a few inches higher.

No Instruments are used at Green Island.

Table I exhibits the readings of the Barometer reduced to 32°.0 Fahrenheit, but not to Sea Level, at the Observatory and at Victoria Peak.

The Mean Height of the Barometer at the Observatory was 30.093, and at the Peak 28.302 inches. The atmospheric tide can scarcely have appreciably exceeded 0.101 at the Observatory. The Barometer at the Peak was not read off with sufficient accuracy and is not sensitive enough for determining the atmospheric tide at that altitude. The highest reading of the Barometer registered at the Observatory was 30.356 at 10 a., on the 8th and at the Peak 28.481 at 10 p., on the same day. The lowest reading was 29.856 at 4 p., on the 29th at the Observatory, and 28.116 at 4 p., on the 30th at the Peak.

Table II and Table III exhibit the readings of the Thermometers (Fahrenheit) at the Observatory, Cape d'Aguilar and the Peak. The Radiation Thermometers had not been fixed at the Peak.

The Mean Temperature during the month was 62.4 at the Observatory, 61.4 at Cape d'Aguilar and 55.5 at Victoria Peak. The 29th was the hottest day, when the Temperature rose to 75.7 at the Observatory, 72.8 at Cape d'Aguilar and 69.1 at the Peak. The 9th was the coldest day, when the Temperature fell to 46.7 at the Observatory, 48.6 at Cape d'Aguilar and 38.0 at the Peak.

The Mean Temperature in Hongkong decreased one degree Fahrenheit for every 280 feet ascended.

Table IV exhibits the Relative Humidity in percentage of saturation (the Humidity of air saturated with moisture being 100) as determined from observations of the Dry and Damp Bulb Thermometers. The Mean Relative Humidity at the Observatory was 76, at Cape d'Aguilar 87½, at the Peak 87. The Least Relative Humidity registered at the Observatory was 34 at 4 p., on the 9th, at Cape d'Aguilar 38 at 10 p., on the 8th, at the Peak 37 at 10 p., on the same day.

Table V exhibits the Tension of the Aqueous Vapour present in the Atmosphere at the Observatory and at Victoria Peak, expressed in inches of mercury. The Mean Tension was 0.443 inches at the Observatory, 0.404 at the Peak. The Greatest Tension registered was 0.589 at 4 p., on the 24th at the Observatory, and 0.546 at 10 a., on the same day at the Peak. The Least Tension was 0.142 at 10 p., on the 8th at the Observatory, 0.124 at the same time at the Peak.

These figures show that the Tension decreased with the altitude of the Observer in Hongkong.

Table VI exhibits the Direction (to two points) and Force of the Wind (0-12), and Sea Disturbance (0-9). The portion of the register, that refers to 4 a., as well as the Sea Disturbance registered at the other hours, has been derived from observations made at the Lighthouses.

The Mean Direction of the Wind at 4 a., is registered as NE. At the other hours, from observations made at the Observatory, as E. But I am inclined to think, that the former Direction is vitiated from want of experience of the Observers. The Mean Force of the Wind was 3.0 corresponding to a velocity of 18 miles per hour. The Force of the Wind was greater during the night than during the day.

Table VII exhibits the Direction and Force of the Wind at Victoria Peak. The Mean Direction is E. and the Mean Force 4.0 corresponding to a velocity of 23 miles per hour.

Table VIII exhibits the Amount, Name and Direction whence coming, of the Clouds. When the Names of Upper and Lower Clouds are given, but only one Direction, this refers to the Lower Clouds. The Mean Direction of the Lower Clouds was E. The Mean Direction of the Upper Clouds cannot be stated, as their heights are so very different, but the observations clearly prove the existence of an upper counter-current from W. On an average 62 per cent of the sky was clouded. The Nebulosity was greater during the night than during the day.

No measurable quantity of Rain fell during the month at the Observatory.—Drizzling Rain fell the 1st at 4 a., the 2nd at 10 p., the 10th at 4 p., the 13th at 10 p., the 25th occasionally during the afternoon and at 10 p., the 30th at 4 a., 10a ., 4 p., and 10 p.,—Duration about 8 hours, the 31st for 2 hours during the afternoon.—The total Duration of Drizzling Rain is estimated at 17 hours.

Fog prevailed extensively at Cape d'Aguilar and at the Peak. No Fog was registered at the Observatory, but the horizon was generally seen more or less hazy.

Heavy Dew fell at the Observatory during the night between the 16th and the 17th, and a Rainbow was seen on the 13th at 5 p.

TABLE I.
BAROMETER.

Date.	Observatory.			Victoria Peak.		
	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.
1884.	ins.	ins.	ins.	ins.	ins.	ins.
January 1,.....	30.135	30.016	30.047	28.358	28.204	28.248
„ 2,.....	30.062	29.974	30.033	28.238	28.193	28.188
„ 3,.....	30.094	30.021	30.072	28.301	28.239	28.280
„ 4,.....	30.129	30.026	30.072	28.335	28.286	28.346
„ 5,.....	30.203	30.089	30.152	28.374	28.349	28.354
„ 6,.....	30.197	30.088	30.156	28.375	28.339	28.351
„ 7,.....	30.229	30.130	30.222	28.353	28.354	28.474
„ 8,.....	30.356	30.232	30.325	28.473	28.471	28.481
„ 9,.....	30.324	30.221	30.291	28.474	28.398	28.455
„ 10,.....	30.281	30.162	30.209	28.471	28.396	28.385
„ 11,.....	30.144	30.046	30.075	28.295	28.244	28.270
„ 12,.....	30.135	30.057	30.127	28.326	28.291	28.302
„ 13,.....	30.153	30.066	30.122	28.339	28.359	28.325
„ 14,.....	30.132	30.020	30.068	28.351	28.247	28.297
„ 15,.....	30.144	30.056	30.127	28.339	28.249	28.312
„ 16,.....	30.138	30.043	30.086	28.317	28.281	28.300
„ 17,.....	30.165	30.105	30.163	28.364	28.343	28.367
„ 18,.....	30.219	30.106	30.170	28.378	28.317	28.353
„ 19,.....	30.190	30.082	30.164	28.374	28.340	28.360
„ 20,.....	30.223	30.116	30.171	28.376	28.305	28.320
„ 21,.....	30.200	30.086	30.135	28.352	28.300	28.319
„ 22,.....	30.113	30.029	30.088	28.294	28.274	28.257
„ 23,.....	30.065	29.960	30.048	28.283	28.215	28.242
„ 24,.....	30.085	30.004	30.053	28.298	28.263	28.293
„ 25,.....	30.097	30.016	30.055	28.285	28.225	28.294
„ 26,.....	30.090	29.974	30.035	28.289	28.232	28.260
„ 27,.....	30.094	29.971	30.012	28.306	28.210	28.206
„ 28,.....	30.027	29.912	29.955	28.236	28.178	28.188
„ 29,.....	29.983	29.856	29.902	28.198	28.133	28.147
„ 30,.....	29.999	29.889	29.944	28.198	28.116	28.152
„ 31,.....	30.049	29.976	30.084	28.257	28.213	28.282
Mean, ...	30.144	30.043	30.102	28.329	28.276	28.303

TABLE II.
THERMOMETER.

Date.	Observatory.							Victoria Peak.						
	10 a.	4 p.	10 p.	Sun.	Max.	Min.	Rad.	10 a.	4 p.	10 p.	Sun.	Max.	Min.	Rad.
1884.	°	°	°	°	°	°	°	°	°	°		°	°	
January 1,.....	57.3	57.8	59.6	90.8	59.6	56.7	...	49.0	49.6	49.8	...	53.0	45.0	...
„ 2,.....	60.8	61.0	61.8	131.0	62.8	58.2	...	53.6	54.0	54.0	...	54.7	51.0	...
„ 3,.....	67.1	66.1	64.0	133.9	67.3	61.1	60.7	58.2	60.2	58.4	...	61.9	50.4	...
„ 4,.....	69.4	68.6	67.0	144.9	73.8	62.6	61.0	61.6	63.2	59.8	...	65.2	57.4	...
„ 5,.....	62.6	64.1	60.1	131.6	66.9	56.5	...	54.0	56.2	54.8	...	56.3	54.0	...
„ 6,.....	62.9	63.1	59.7	136.2	65.7	58.2	56.0	54.8	60.6	53.6	...	60.7	51.2	...
„ 7,.....	60.2	66.6	62.3	125.9	67.1	58.8	57.4	53.6	58.2	55.0	...	58.3	53.2	...
„ 8,.....	55.4	59.1	52.5	131.2	62.6	52.5	49.6	48.8	53.2	46.2	...	53.3	46.0	...
„ 9,.....	57.6	57.5	54.1	128.6	60.1	46.7	44.3	48.8	49.4	47.2	...	51.1	38.0	...
„ 10,.....	56.7	60.9	59.5	122.0	62.4	52.8	49.0	48.2	51.4	50.8	...	51.9	45.0	...
„ 11,.....	59.0	59.9	60.1	128.3	60.1	56.9	56.1	50.4	52.8	53.6	...	54.1	48.4	...
„ 12,.....	63.8	66.5	62.0	124.7	67.7	59.5	58.2	56.6	59.0	58.0	...	59.1	47.4	...
„ 13,.....	69.1	63.7	64.0	143.6	70.3	60.6	56.9	57.8	57.6	56.8	...	59.9	50.0	...
„ 14,.....	66.5	66.2	64.0	142.9	68.0	63.3	61.4	60.0	59.8	58.8	...	60.3	56.0	...
„ 15,.....	62.9	63.5	61.2	138.6	64.7	61.0	59.8	54.8	57.6	53.8	...	58.3	53.8	...
„ 16,.....	62.9	64.9	60.0	146.9	66.8	59.2	58.5	54.2	58.8	56.2	...	58.9	52.0	...
„ 17,.....	66.0	63.6	62.5	133.4	66.0	56.9	54.0	60.6	61.8	54.8	...	61.9	54.0	...
„ 18,.....	62.1	60.1	58.8	134.9	64.1	57.3	56.4	52.8	54.4	50.8	...	56.9	50.0	...
„ 19,.....	60.0	61.2	58.1	131.6	63.6	56.8	55.0	50.8	59.8	52.6	...	62.1	49.2	...
„ 20,.....	59.8	61.2	59.0	132.0	62.2	57.7	55.8	52.4	53.8	53.2	...	57.1	49.4	...
„ 21,.....	59.3	60.1	59.8	134.9	62.4	56.3	55.6	50.6	52.8	51.8	...	56.9	48.0	...
„ 22,.....	60.6	62.6	61.3	132.9	63.7	57.3	56.3	52.8	55.8	54.6	...	58.5	49.8	...
„ 23,.....	66.9	68.1	64.9	141.2	71.3	60.7	59.9	59.0	61.6	60.0	...	54.3	49.8	...
„ 24,.....	68.9	69.0	66.1	109.9	71.0	63.9	63.2	61.6	62.8	60.8	...	63.5	50.0	...
„ 25,.....	62.4	63.9	62.9	128.2	66.5	61.7	60.8	57.8	57.8	56.8	...	61.3	56.4	...
„ 26,.....	64.7	67.6	65.0	144.7	73.5	59.8	60.9	60.6	63.8	59.8	...	66.7	56.4	...
„ 27,.....	69.5	63.2	62.8	140.4	72.8	62.3	62.0	64.0	57.6	56.6	...	64.1	54.0	...
„ 28,.....	65.1	65.2	62.9	141.8	68.1	60.5	59.2	58.6	59.8	59.0	...	62.7	55.0	...
„ 29,.....	67.8	72.3	65.9	142.9	75.7	61.7	59.9	60.8	64.8	61.0	...	69.1	58.4	...
„ 30,.....	61.8	62.2	62.7	92.3	65.9	60.1	60.1	57.0	57.0	56.8	...	61.9	56.0	...
„ 31,.....	65.1	65.3	62.0	143.6	68.0	61.7	61.3	58.8	63.2	55.8	...	65.5	55.4	...
Mean, ...	63.0	63.7	61.5	131.8	66.5	58.7	57.5	55.6	57.7	55.2	...	59.7	51.3	...

TABLE III.
THERMOMETER.

Date.	Cape d'Aguilar.					
	4 a.	10 a.	4 p.	10 p.	Max.	Min.
1884.	°	°	°	°	°	°
January 1,.....	57.6	57.6	57.6	59.6	60.8	57.6
„ 2,.....	58.1	60.1	60.4	61.6	61.6	57.6
„ 3,.....	61.6	63.1	63.1	63.6	63.8	61.1
„ 4,.....	63.1	67.6	68.6	65.6	68.8	61.6
„ 5,.....	64.6	61.6	61.6	61.6	65.8	60.6
„ 6,.....	61.6	61.8	61.1	60.6	64.8	60.1
„ 7,.....	60.6	60.6	65.6	60.6	65.6	59.6
„ 8,.....	54.6	56.1	60.6	54.0	62.8	53.1
„ 9,.....	52.6	58.3	58.1	57.6	58.3	48.6
„ 10,.....	55.6	56.0	59.6	59.6	59.8	53.6
„ 11,.....	58.3	58.6	59.6	59.6	59.8	57.6
„ 12,.....	59.6	63.1	62.8	62.6	63.8	59.6
„ 13,.....	61.6	64.6	63.8	62.6	65.8	60.6
„ 14,.....	62.6	63.8	63.6	61.6	63.8	61.6
„ 15,.....	63.6	61.6	62.6	61.6	63.8	60.6
„ 16,.....	61.1	60.6	60.6	60.6	61.8	60.1
„ 17,.....	62.6	61.6	61.6	61.6	62.6	58.9
„ 18,.....	58.6	59.6	60.1	59.6	61.8	58.6
„ 19,.....	58.6	58.1	59.6	59.6	60.8	58.1
„ 20,.....	59.6	58.1	60.3	59.1	60.3	58.1
„ 21,.....	58.6	57.8	59.6	59.6	60.2	56.6
„ 22,.....	59.6	59.6	60.6	60.1	60.8	58.1
„ 23,.....	59.6	66.1	65.0	64.6	66.8	59.6
„ 24,.....	64.6	64.9	67.2	65.6	67.8	63.6
„ 25,.....	64.4	61.1	61.9	61.6	65.8	61.1
„ 26,.....	61.6	62.6	63.6	63.6	65.8	60.6
„ 27,.....	63.6	68.3	62.6	61.6	67.8	61.6
„ 28,.....	61.6	62.4	64.4	62.6	64.8	61.6
„ 29,.....	63.1	65.6	71.6	65.6	72.8	61.6
„ 30,.....	61.1	60.6	61.0	60.6	65.8	60.6
„ 31,.....	61.1	62.6	62.6	61.6	63.8	61.1
Mean, ...	60.5	61.4	62.3	61.3	63.8	59.1

TABLE IV.
RELATIVE HUMIDITY.

Date.	Observatory.			Cape d'Aguilar.				Victoria Peak.		
	10 a.	4 p.	10 p.	4 a.	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.
1884.										
January 1,.....	75	72	72	78	80	81	79	98	93	95
„ 2,.....	75	77	82	93	81	85	91	94	96	94
„ 3,.....	74	82	91	91	85	94	96	97	99	99
„ 4,.....	74	77	73	91	81	82	72	94	87	87
„ 5,.....	78	68	89	83	86	85	91	99	88	93
„ 6,.....	78	75	88	93	91	88	91	99	83	99
„ 7,.....	82	66	80	90	86	92	85	99	84	98
„ 8,.....	52	38	35	64	65	42	38	50	53	37
„ 9,.....	42	34	62	50	51	47	49	49	41	66
„ 10,.....	54	50	73	71	63	62	73	67	56	90
„ 11,.....	77	84	90	86	90	94	97	96	99	98
„ 12,.....	77	64	80	99	83	84	86	89	81	74
„ 13,.....	59	71	75	88	80	79	93	81	76	86
„ 14,.....	66	71	75	91	87	91	97	69	76	87
„ 15,.....	80	80	82	86	93	89	91	99	88	99
„ 16,.....	74	77	93	93	93	97	94	95	87	91
„ 17,.....	73	80	73	91	91	91	91	83	71	86
„ 18,.....	67	72	80	84	84	82	88	90	82	99
„ 19,.....	71	69	81	99	93	85	88	99	76	87
„ 20,.....	64	74	80	90	87	88	94	79	80	87
„ 21,.....	70	68	79	87	89	73	100	87	82	92
„ 22,.....	75	75	89	90	90	94	99	93	88	98
„ 23,.....	80	80	89	99	84	99	97	98	93	97
„ 24,.....	83	83	90	94	97	94	97	99	88	99
„ 25,.....	93	88	89	100	100	100	100	99	99	99
„ 26,.....	86	79	85	100	97	97	97	89	81	87
„ 27,.....	69	89	88	86	88	97	97	82	95	95
„ 28,.....	79	83	91	96	92	86	92	93	87	92
„ 29,.....	85	73	91	91	92	83	100	96	83	92
„ 30,.....	94	91	92	100	100	94	99	99	99	99
„ 31,.....	85	83	91	99	96	96	100	98	85	99
Mean, ...	74	73	82	89	86	86	89	89	83	90

TABLE V.

TENSION OF AQUEOUS VAPOUR EXPRESSED IN INCHES OF MERCURY.

Date.	Observatory.			Victoria Peak.		
	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.
1884.						
January 1,.....	0.355	0.346	0.371	0.342	0.328	0.340
„ 2,.....	0.402	0.431	0.452	0.388	0.405	0.393
„ 3,.....	0.490	0.532	0.544	0.472	0.520	0.488
„ 4,.....	0.529	0.542	0.481	0.503	0.508	0.453
„ 5,.....	0.443	0.406	0.465	0.417	0.399	0.400
„ 6,.....	0.446	0.437	0.452	0.428	0.442	0.410
„ 7,.....	0.430	0.435	0.449	0.410	0.414	0.426
„ 8,.....	0.228	0.190	0.142	0.182	0.225	0.124
„ 9,.....	0.199	0.161	0.265	0.178	0.152	0.220
„ 10,.....	0.253	0.269	0.372	0.230	0.219	0.334
„ 11,.....	0.387	0.434	0.468	0.355	0.398	0.405
„ 12,.....	0.456	0.416	0.446	0.411	0.410	0.361
„ 13,.....	0.420	0.424	0.449	0.391	0.365	0.403
„ 14,.....	0.437	0.460	0.449	0.364	0.400	0.436
„ 15,.....	0.464	0.470	0.448	0.428	0.421	0.413
„ 16,.....	0.424	0.474	0.481	0.402	0.436	0.411
„ 17,.....	0.470	0.475	0.411	0.440	0.399	0.374
„ 18,.....	0.373	0.378	0.399	0.361	0.351	0.370
„ 19,.....	0.368	0.375	0.393	0.370	0.395	0.346
„ 20,.....	0.329	0.399	0.401	0.319	0.338	0.354
„ 21,.....	0.361	0.356	0.409	0.321	0.329	0.358
„ 22,.....	0.401	0.425	0.486	0.372	0.393	0.420
„ 23,.....	0.528	0.547	0.549	0.492	0.515	0.504
„ 24,.....	0.583	0.589	0.580	0.546	0.507	0.531
„ 25,.....	0.526	0.526	0.510	0.478	0.478	0.461
„ 26,.....	0.528	0.533	0.527	0.472	0.488	0.453
„ 27,.....	0.500	0.515	0.501	0.493	0.450	0.434
„ 28,.....	0.493	0.518	0.523	0.461	0.453	0.463
„ 29,.....	0.575	0.577	0.577	0.512	0.513	0.499
„ 30,.....	0.521	0.510	0.525	0.464	0.464	0.461
„ 31,.....	0.526	0.520	0.506	0.489	0.494	0.444
Mean,.....	0.434	0.441	0.453	0.403	0.407	0.403

TABLE VI.

DIRECTION AND FORCE OF THE WIND, AND SEA DISTURBANCE.

Date.	4 a.			10 a.			4 p.			10 p.		
	Direction	Force.	Sea.	Direction	Force.	Sea.	Direction	Force.	Sea.	Direction	Force.	Sea.
1884.												
January 1,.....	NE	6	5	NE	6	5	ENE	5	5	ENE	4	4
„ 2,.....	NE	5	4	NE	4	4	ENE	4	4	E	4	4
„ 3,.....	NE	4	4	ENE	4	4	E	2	3	ENE	2	3
„ 4,.....	NE	2	2	ESE	2	2	WNW	1	2	Calm	0	2
„ 5,.....	ENE	3	2	NE	2	3	E	3	5	ESE	2	5
„ 6,.....	ENE	3	3	ESE	2	4	E	2	3	Calm	0	3
„ 7,.....	NE	3	3	E	3	5	E	1	2	Calm	0	3
„ 8,.....	NE	5	3	NNE	4	3	NNE	2	4	NE	2	4
„ 9,.....	N	4	3	NE	1	3	E	3	3	NE	1	3
„ 10,.....	NE	3	4	ENE	2	4	NE	1	3	ENE	3	4
„ 11,.....	NE	5	4	ENE	6	5	ENE	3	5	ENE	4	4
„ 12,.....	NNE	3	3	E	2	3	ESE	2	3	Calm	0	3
„ 13,.....	NNE	2	2	ESE	2	2	ENE	2	3	ENE	4	4
„ 14,.....	NE	4	4	E	3	3	E	4	3	E	4	2
„ 15,.....	NE	4	4	ENE	6	5	ENE	6	5	E	6	5
„ 16,.....	NE	6	5	ENE	4	5	E	1	3	Calm	0	3
„ 17,.....	E	1	2	ESE	2	2	E	2	2	ENE	2	2
„ 18,.....	NE	2	3	E	3	3	ESE	3	2	ENE	3	2
„ 19,.....	NE	4	3	E	3	3	E	3	3	ENE	2	3
„ 20,.....	NE	4	5	ENE	6	6	E	4	5	E	6	6
„ 21,.....	NE	5	6	E	6	6	ESE	5	4	E	4	4
„ 22,.....	NE	5	5	E	6	5	E	5	4	E	2	3
„ 23,.....	ENE	2	3	E	2	2	E	3	3	E	2	3
„ 24,.....	ENE	2	2	ESE	1	1	ESE	1	2	E	1	2
„ 25,.....	NE	3	3	E	3	4	E	2	4	E	3	4
„ 26,.....	NE	3	3	ESE	3	3	E	3	3	E	1	2
„ 27,.....	NE	2	2	E	1	1	E	5	3	E	3	4
„ 28,.....	NE	4	4	E	3	4	E	3	3	E	3	3
„ 29,.....	NE	2	2	ENE	1	2	SE	1	1	E	3	1
„ 30,.....	NE	5	4	E	4	5	E	4	4	E	3	4
„ 31,.....	NE	3	4	E	5	3	E	4	4	E	2	4
Mean,.....	NE	3.5	3.4	E	3.3	3.5	E	2.9	3.3	E	2.4	3.3

Daily Force

TABLE VII.

DIRECTION AND FORCE OF THE WIND AT VICTORIA PEAK.

Date.	10 a.		4 p.		10 p.	
	Direction.	Force.	Direction.	Force.	Direction.	Force.
1884.						
January 1,.....	E	6	E	5	E	4
„ 2,.....	E	5	SE	5	SE	6
„ 3,.....	E	4	SE	4	SE	2
„ 4,.....	SE	2	SE	2	NE	2
„ 5,.....	E	5	E	4	E	3
„ 6,.....	E	4	E	2	E	4
„ 7,.....	E	5	N	3	NNE	4
„ 8,.....	NNE	5	NNE	4	NNE	4
„ 9,.....	E	4	E	4	E	3
„ 10,.....	E	4	NE	4	ENE	4
„ 11,.....	E	6	E	5	E	5
„ 12,.....	E	4	E	4	E	3
„ 13,.....	E	4	E	5	E	5
„ 14,.....	E	5	E	5	E	4
„ 15,.....	E	5	E	6	E	6
„ 16,.....	E	5	E	3	E	2
„ 17,.....	ENE	4	N	3	NE	4
„ 18,.....	ENE	5	E	4	E	2
„ 19,.....	E	5	E	3	E	4
„ 20,.....	E	6	E	5	E	6
„ 21,.....	E	5	E	3	E	5
„ 22,.....	E	5	E	4	E	5
„ 23,.....	SE	4	SE	2	SE	5
„ 24,.....	E	4	ESE	3	E	2
„ 25,.....	E	5	E	4	E	3
„ 26,.....	E	4	E	3	E	2
„ 27,.....	E	3	E	4	E	5
„ 28,.....	SE	4	ESE	2	ESE	2
„ 29,.....	SE	3	S	3	S	3
„ 30,.....	E	5	ESE	4	ESE	4
„ 31,.....	E	3	E	2	E	5
Mean,.....	E	4.5	E	3.7	E	3.8

TABLE VIII.

AMOUNT AND CLASSIFICATION OF CLOUDS AND DIRECTION WHENCE COMING.

DATE.	4 a.			10 a.			4 p.			10 p.		
	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction
1884.												
ary 1, ...	10	cum.	ENE	10	cum.	E	7	c-cum. / cum.	WNW / ESE	10	c-cum. / cum.	WNW / ENE
2, ...	9	cum.	....	9	c-cum. / R-cum.	NNW / SE	10	R-cum.	E	10	cum-nim.	...
3, ...	7	R-cum.	...	6	c-cum. / R-cum.	W / SE	7	R-cum.	SE	10	R-cum.	...
4, ...	5	c-cum. / cum.	...	2	c-cum. / cum.	WSW / ESE	8	cum.	NNW	9	str.	...
5, ...	9	cum.	...	10	R-cum.	NE	2	R-cum.	ENE	0	...	...
6, ...	7	c-cum. / R-cum.	...	9	c-cum. / R-cum.	WNW / ENE	0	...	...	2	cum.	ENE
7, ...	8	c-cum. / nim.	ENE	10	R-cum.	E	1	cum.	NE	3	c-cum.	NNW
8, ...	4	c-cum.	...	3	c-cum.	NW	0	...	...	0	...	...
9, ...	0	...	...	0	...	...	0	...	...	0	...	...
10, ...	8	R-cum.	...	10	R-cum.	E	10	R-cum.	E	10	cum-nim.	SSW
11, ...	9	R-cum.	E	10	R-cum.	E	10	str.	ESE	10	str.	ENE
12, ...	9	cum-nim.	E	10	cum. / str.	SSE / E	3	cum.	ESE	1	cum.	SSE
13, ...	4	cum.	...	9	cum.	ESE	9	cum-nim.	SE	9	cum.	ESE
14, ...	8	cum.	E	9	cum.	E	2	R-cum.	E	4	c-cum.	SSE
15, ...	8	cum.	ENE	7	cum.	ENE	2	cum.	ENE	10	R-cum.	E
16, ...	10	cum-nim.	E	4	R-cum.	E	10	R-cum.	E	0	...	...
17, ...	0	...	...	0	...	...	0	...	...	8	R-cum.	NE
18, ...	9	cum.	ENE	3	cum.	E	10	R-cum.	NNW	8	R-cum.	ENE
19, ...	8	cum.	ENE	1	c. / cum.	WNW / E	0	...	...	0	...	...
20, ...	0	...	...	1	sm-cum.	E	0	...	...	9	cum.	E
21, ...	8	cum.	E	5	cum.	E	9	R-cum.	ESE	7	cum.	SE
22, ...	7	cum.	E	4	cum.	E	3	c-cum. / cum.	WSW / E	10	str.	...
23, ...	5	cum.	E	9	c-cum. / cum-nim.	SE / E	7	c-cum. / R-cum.	E	2	str.	...
24, ...	10	cum.	E	10	str.	E	10	str.	SSE	10	str.	...
25, ...	9	cum.	E	10	nim.	E	10	nim.	E	10	nim.	E
26, ...	10	nim.	E	9	R-cum.	ESE	5	c-cum. / R-cum.	SW / NE	9	sm-cum.	NE
27, ...	4	cum.	E	1	sm-cum.	E	10	R-cum.	E	9	R-cum.	E
28, ...	3	R-cum.	E	7	R-cum.	E	10	R-cum.	SE	0	...	...
29, ...	4	cum.	...	9	R-cum.	SE	1	sm-cum.	SSE	9	cum.	SE
30, ...	10	nim.	E	10	nim.	E	10	nim.	E	10	nim.	...
31, ...	7	cum-nim.	E	4	cum.	E	2	cum.	E	10	nim.	...
Mean,.....	6.7	...	E	6.5	...	E	5.4	...	E	6.4	...	E

Hongkong Observatory, 11th February, 1884.

W. DOBERCK,
Government Astronomer

HONGKONG OBSERVATORY.

Weather Report for February, 1884.

In the *China Coast Meteorological Register*—based on information transmitted by the Great Northern and the Eastern Extension Telegraph Companies—which I have published daily, is given a summary of the atmospheric circumstances in Manila and along the Coast of China as far north as Shanghai.

At the beginning of the month the Barometer had risen to about its mean height here. It registered 30.5 inches at Shanghai and 30.1 inches at Manila. Fresh or Strong E. Breezes, indicated by the Gradients, prevailed here. The Barometer fell slowly along the Coast and at the same time it rose in Manila. On the 3rd at 10 a. the lowest Pressure was registered at Hongkong. Hence Gradients were inverted and the Wind veered to W. The Temperature was high and in the afternoon a remarkable squall passed across the Coast and brought down heavy Rain S. of Shanghai, in which place a severe snow-storm was experienced. The following days normal atmospheric conditions set in, the sky cleared and Temperature and Humidity decreased owing to the prevalence of Northerly Winds. On the 10th, Gradients indicated Easterly Winds, the Barometer having slightly fallen here. The sky was overcast, the Temperature and the Humidity increased and Rain fell at most stations along the Coast. The following days the Barometer continued falling, Gradients indicated gentle Winds and the Humidity rose to a maximum. The Barometer then continued almost stationary with moderate Gradients for NE. Winds up to the 21st. The sky continued overcast, the Temperature was rising and the Humidity great. The 21st the Barometer rose, the sky cleared and the Humidity decreased. The Barometer fell again between the 24th and the 28th but the 27th it stood higher here than at Shanghai. The Humidity was then increasing but partially clear sky still obtained.

The Standard Barometer at the Observatory is placed 110 feet above Mean Sea Level. The bulbs of the Thermometers are about 109 feet above Mean Sea Level and 4 feet above the ground, except the Maximum Thermometer, which is a few inches higher, and the Terrestrial Radiation Thermometer, which is about one inch above the ground. The four Thermometers are fixed in a Stephenson Screen at a distance of 75 feet SW. of the main building, but they are placed over dry earth, as the levelled ground round the Observatory has not yet been turfed. Most of the Self-recording Instruments were erected in the course of February. It is expected that they will be adjusted and ready for work during the month of March.

At Victoria Peak, the Instruments, except the Radiation Thermometers, are placed in the Look-out. The Barometer is about 1,823 feet above Sea Level. The bulbs of the Thermometers are about 4 feet above the floor, except the Maximum and the Terrestrial Radiation Thermometers, which are placed at the same height above the ground as at the Observatory. Unfortunately the Solar Radiation Thermometer was not properly placed, and the readings are therefore somewhat defective. At Cape d'Aguilar, the Thermometers are placed about 170 feet above Sea Level, in a wooden screen 2 feet above the ground, except the Maximum Thermometer, which is a few inches higher.

Table I exhibits the readings of the Barometer reduced to 32.0 Fahrenheit, but not to Sea Level, at the Observatory and at Victoria Peak.

The Mean Height of the Barometer at the Observatory was 30.061, and at the Peak 28.244 inches. The atmospheric tide can scarcely have appreciably exceeded 0.109 at the Observatory. The Barometer at the Peak is not sensitive enough for determining the atmospheric tide at that altitude. The highest reading of the Barometer registered at the Observatory was 30.311 at 10 a. on the 24th; and at the Peak, 28.458 at the same time. The lowest reading was 29.809 at 4 p. on the 3rd at the Observatory and 28.029 at the same time at the Peak.

Table II and Table III exhibit the readings of the Thermometers (Fahrenheit) at the Observatory, Cape d'Aguilar, and the Peak.

The Mean Temperature during the month was 57.2 at the Observatory, 56.3 at Cape d'Aguilar and 50.6 at the Peak. The Highest Temperature registered was 70.0 on the 3rd, at the Observatory; 65.0 on the 18th, at Cape d'Aguilar; and 63.5 on the 28th, at the Peak. The Lowest Temperature was 42.8 on the 7th, at the Observatory; 43.6 at Cape d'Aguilar; and 35.8 on the same day, at the Peak.

The Mean Temperature in Hongkong decreased one degree Fahrenheit for every 280 feet ascende

Table IV exhibits the Relative Humidity in percentage of saturation (the Humidity of air satu ated with moisture being 100) as determined from observations of the Dry and Damp Bulb Thermom eters. The Mean Relative Humidity at the Observatory was 78, at Cape d'Aguilar 88, at the Pe 88. The Least Relative Humidity registered at the Observatory was 36 at 4 p. on the 24th; 45 at t same time at the Peak; and 44 at 10 p. on the same day at Cape d'Aguilar.

Table V exhibits the Tension of Aqueous Vapour present in the Atmosphere at the Observato and at Victoria Peak, expressed in inches of mercury. The Mean Tension was 0.377 inches at t Observatory and 0.337 inches at the Peak. The Greatest Tension registered at the Observatory w 0.517 at 10 p. on the 19th; and at the Peak 0.535 at 10 a. on the 3rd. The Least Tension was 0.1 at 4 p. and 10 p. on the 7th at the Observatory; and 0.156 at 4 p. on the same day at the Peak.

Table VI exhibits the amount of Rain collected at 10 a. on the following day, and the Durati of Precipitation as estimated at the Observatory. The greatest amount of Rain fell on the 3rd when rained 1.266 at the Observatory, 1.34 at Stone Cutters' Island, and 1.75 at the Peak.—It appears th the amount of Rain increased with the altitude of the Observer in Hongkong.

The Rain at Stone Cutters' Island is, by order of Captain THOMSETT, R.N., Harbour Master, et measured by the officer in charge of the Gunpowder Depôt. The gauge is situated about 15 feet abo Sea Level and 28 inches above the Ground.

Table VII exhibits the Direction (to two points) and Force of the Wind (0-12) and Sea distur ance (0-9). The portion of the register that refers to 4 a., as well as the Sea Disturbance at the oth hours, has been derived from observations made at the Light-houses.—The Mean Force of the Wi was 3.1, corresponding to a velocity of 18 miles per hour. The Mean Direction was ENE. T Force of the Wind was greatest in the early morning hours.

Table VIII exhibits the Direction and Force of the Wind at Victoria Peak. The Mean Directi was ENE., and the Mean Force 4.2 corresponding to a Velocity of 24 miles per hour.

Table IX exhibits the Amount, Name and Direction, whence coming, of the Clouds. When t names of Upper and Lower Clouds are given, but only one Direction, this refers to the Lower Clou The prevailing Direction of the Lower Clouds was from E. or North of E., but on several days th were observed to come from W. or SW. The Mean Direction of the Highest Clouds was W. On average 67 per cent of the sky was clouded. The Nebulosity was greater during the day than duri the night.

Drizzling Rain, while the instruments were being read off, was registered at the Observatory the 2nd at 10 p., the 11th at 4 p., the 12th at 10 a., the 14th at 10 p., the 15th at 4 p., the 17th at 4 the 18th at 10 p., the 19th at 10 p., and the 20th at 10 a.

It was raining while the instruments were being read off on the 3rd at 4 p. and 10 p., the 5th 10 p., the 12th at 4 p. and 10 p., and the 17th at 10 a.

Unusual Visibility was noted on the 4th, the 21st, the 28th, and the 29th.

Dew fell on the 13th at 10 p. and on the 21st at 10 p.

A Lunar Halo was noted on the 9th at 10 p., and a Lunar Corona on the 13th at 10 p.

Fog was not noted at the Observatory, but occurred frequently at Cape d'Aguilar and at the Pea

TABLE I.
BAROMETER.

Date.	Observatory.			Victoria Peak.		
	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.
1884.	ins.	ins.	ins.	ins.	ins.	ins.
February 1,.....	30.178	30.081	30.130	28.341	28.245	28.319
„ 2,.....	30.159	29.970	29.982	28.311	28.168	28.205
„ 3,.....	29.867	29.809	29.890	28.078	28.029	28.066
„ 4,.....	30.039	29.893	29.988	28.180	28.082	28.147
„ 5,.....	29.983	29.838	29.893	28.151	28.060	28.098
„ 6,.....	29.959	29.889	30.062	28.112	28.072	28.197
„ 7,.....	30.145	30.076	30.201	28.272	28.259	28.337
„ 8,.....	30.281	30.159	30.242	28.383	28.323	28.378
„ 9,.....	30.270	30.146	30.200	28.405	28.317	28.367
„ 10,.....	30.224	30.096	30.158	28.366	28.292	28.343
„ 11,.....	30.179	30.062	30.096	28.331	28.223	28.265
„ 12,.....	30.046	29.922	29.980	28.217	28.127	28.148
„ 13,.....	30.036	29.938	30.025	28.217	28.155	28.201
„ 14,.....	30.070	29.973	30.012	28.234	28.181	28.220
„ 15,.....	30.029	29.919	29.962	28.203	28.125	28.180
„ 16,.....	30.006	29.892	29.978	28.208	28.141	28.180
„ 17,.....	30.030	29.980	30.057	28.217	28.167	28.251
„ 18,.....	30.116	30.017	30.072	28.309	28.211	28.291
„ 19,.....	30.079	29.951	30.038	28.260	28.191	28.223
„ 20,.....	30.018	29.982	30.097	28.243	28.192	28.213
„ 21,.....	30.150	30.043	30.126	28.319	28.263	28.282
„ 22,.....	30.235	30.157	30.225	28.395	28.319	28.375
„ 23,.....	30.293	30.174	30.271	28.430	28.378	28.437
„ 24,.....	30.311	30.226	30.272	28.458	28.406	28.437
„ 25,.....	30.290	30.139	30.165	28.428	28.335	28.328
„ 26,.....	30.168	30.019	30.051	28.330	28.235	28.213
„ 27,.....	30.027	29.919	29.978	28.217	28.169	28.199
„ 28,.....	30.010	29.951	30.019	28.232	28.190	28.236
„ 29,.....	30.078	29.966	29.990	28.253	28.180	28.191
Mean, ...	30.115	30.006	30.073	28.279	28.209	28.253

TABLE II.
THERMOMETER.

Date.	Observatory.							Victoria Peak.						
	10 a.	4 p.	10 p.	Sun.	Max.	Min.	Rad.	10 a.	4 p.	10 p.	Sun.	Max.	Min.	Rad.
1884.	°	°	°	°	°	°	°	°	°	°	°	°	°	°
February 1,.....	59.2	58.9	59.0	102.4	62.7	58.2	58.7	52.2	51.0	51.6	102.0	53.7	51.0	50.5
„ 2,.....	58.9	59.1	59.5	137.7	62.8	56.7	56.9	50.0	51.0	51.8	131.0	54.5	48.8	47.5
„ 3,.....	61.8	55.1	52.6	111.0	70.0	52.3	52.3	61.0	49.0	49.0	85.0	61.1	48.4	46.5
„ 4,.....	50.2	57.9	47.5	122.3	59.1	45.5	45.0	42.8	48.0	43.0	112.0	48.1	39.2	36.7
„ 5,.....	55.0	56.9	58.8	114.8	58.8	45.7	44.6	47.2	48.0	50.4	121.0	51.1	41.0	35.5
„ 6,.....	51.6	52.2	46.9	96.6	58.6	46.3	43.5	45.0	43.8	40.8	96.0	49.1	40.8	35.5
„ 7,.....	47.5	53.2	48.0	119.7	55.9	42.8	41.0	40.2	45.2	41.4	109.0	46.9	35.8	30.9
„ 8,.....	49.1	54.5	51.1	120.4	56.7	43.9	41.4	41.4	45.8	43.8	102.0	46.9	39.0	33.5
„ 9,.....	53.2	54.6	54.3	122.6	56.6	46.7	45.1	45.0	45.8	45.8	109.0	48.9	41.0	37.5
„ 10,.....	54.9	57.4	56.8	125.8	57.9	52.9	52.0	46.0	48.8	47.8	111.0	50.9	44.0	40.7
„ 11,.....	55.1	54.9	54.8	88.4	56.7	52.6	51.8	47.4	47.2	47.0	68.4	48.2	46.0	43.1
„ 12,.....	55.4	54.8	55.2	72.0	55.8	53.8	52.6	48.8	49.4	51.6	64.0	52.1	47.2	41.1
„ 13,.....	55.7	59.1	56.6	129.9	61.5	53.3	52.6	50.2	50.2	50.2	122.0	52.7	46.2	42.7
„ 14,.....	58.6	58.3	56.8	127.0	59.5	54.5	52.0	52.0	51.0	51.4	90.8	52.6	46.2	43.1
„ 15,.....	57.6	58.2	58.0	90.0	58.9	55.7	54.4	51.0	52.8	55.8	93.8	57.3	49.4	49.3
„ 16,.....	60.7	61.9	59.8	105.8	63.2	57.3	56.4	55.4	55.8	54.6	96.0	57.3	53.2	53.7
„ 17,.....	57.7	57.4	58.6	90.1	60.1	56.9	55.7	52.6	52.8	52.8	77.8	54.8	50.0	51.5
„ 18,.....	61.0	60.1	59.5	129.1	61.8	57.4	56.8	56.6	55.0	55.8	122.0	57.3	52.0	...
„ 19,.....	59.8	60.8	60.4	121.6	61.8	58.8	58.6	54.6	55.8	57.6	110.0	57.9	51.4	...
„ 20,.....	59.9	60.8	59.2	95.6	61.9	58.9	58.1	54.6	55.8	54.0	86.0	55.1	52.6	...
„ 21,.....	60.4	65.1	56.8	131.1	67.8	55.8	53.4	52.0	58.0	54.6	116.0	59.7	48.0	...
„ 22,.....	59.0	60.0	56.9	127.0	62.3	54.6	52.0	51.8	54.6	51.2	114.0	55.1	46.2	...
„ 23,.....	60.5	61.1	57.2	141.0	66.4	55.8	54.6	52.6	55.0	51.8	126.2	56.3	48.0	47.5
„ 24,.....	60.7	58.3	55.7	138.8	64.4	53.7	51.1	50.2	50.9	47.8	117.2	55.9	40.0	42.5
„ 25,.....	58.0	57.2	54.8	130.3	60.7	50.5	46.2	50.8	50.6	47.0	125.0	54.1	40.0	39.5
„ 26,.....	58.4	58.9	57.6	131.2	61.8	52.3	50.4	50.8	53.4	53.2	118.0	54.2	41.2	42.5
„ 27,.....	62.8	66.1	60.5	139.2	66.6	56.1	54.7	55.6	61.8	57.6	124.0	61.8	41.0	41.5
„ 28,.....	64.4	67.3	62.0	134.2	67.9	59.7	57.7	59.2	61.0	57.8	124.4	63.5	51.0	51.7
„ 29,.....	64.6	64.2	61.5	134.6	65.5	59.3	58.0	57.0	58.6	56.2	119.0	61.7	53.2	50.5
Mean, ...	57.6	58.8	56.4	118.3	61.4	53.4	51.9	50.8	51.9	50.8	106.6	54.4	46.3	43.2

TABLE III.
THERMOMETER.

Date.	Cape d'Aguilar.					
	4 a.	10 a.	4 p.	10 p.	Max.	Min.
1884.	°	°	°	°	°	°
February 1,.....	60.6	59.6	58.6	58.4	62.8	58.4
„ 2,.....	57.1	56.9	58.6	58.6	59.3	56.9
„ 3,.....	58.6	59.6	56.8	55.6	62.8	55.6
„ 4,.....	49.6	52.9	58.6	49.6	60.8	46.6
„ 5,.....	50.6	54.6	55.6	58.6	59.8	48.6
„ 6,.....	54.6	54.6	52.8	47.6	58.8	47.6
„ 7,.....	44.1	49.6	54.6	49.6	57.1	43.6
„ 8,.....	45.6	48.6	52.6	51.6	52.8	45.6
„ 9,.....	51.6	52.6	53.5	54.6	54.8	49.6
„ 10,.....	54.6	53.6	55.8	56.6	56.8	53.6
„ 11,.....	54.6	54.1	54.6	54.6	56.5	52.6
„ 12,.....	55.1	55.6	55.1	55.6	55.6	55.1
„ 13,.....	55.1	55.6	61.6	57.6	61.8	55.1
„ 14,.....	55.6	58.6	57.6	56.6	61.8	55.6
„ 15,.....	55.6	56.6	57.1	57.6	...	...
„ 16,.....	58.6	59.6	58.9	59.1	62.8	57.6
„ 17,.....	57.6	57.6	57.1	57.6	61.8	57.1
„ 18,.....	57.6	59.1	58.9	57.8	65.0	57.6
„ 19,.....	58.2	58.1	58.6	59.6	61.0	58.1
„ 20,.....	59.6	58.6	59.3	57.6	60.8	57.6
„ 21,.....	56.6	63.4	63.8	56.8	61.8	56.6
„ 22,.....	57.1	58.4	58.6	57.6	58.8	55.6
„ 23,.....	56.6	57.9	58.2	56.8	60.1	56.6
„ 24,.....	54.6	57.9	58.8	55.6	61.8	54.6
„ 25,.....	52.6	56.5	56.1	56.4	57.2	51.6
„ 26,.....	53.6	56.1	56.6	55.8	57.8	53.6
„ 27,.....	58.6	59.9	61.0	58.6	61.8	58.6
„ 28,.....	59.9	61.0	62.2	61.6	62.8	58.6
„ 29,.....	59.6	61.0	61.6	59.9	63.0	59.6
Mean, ...	55.3	56.8	57.7	56.4	60.2	54.2

TABLE IV.
RELATIVE HUMIDITY.

Date.	Observatory.			Cape d'Aguilar.				Victoria Peak.		
	10 a.	4 p.	10 p.	4 a.	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.
1884.										
February 1,.....	83	81	81	91	91	91	91	97	98	93
„ 2,.....	73	76	85	91	88	85	90	96	93	99
„ 3,.....	93	95	91	100	100	95	99	99	99	98
„ 4,.....	69	57	74	89	80	75	82	82	76	90
„ 5,.....	71	78	89	89	83	94	97	91	96	99
„ 6,.....	93	77	73	100	100	94	81	98	99	89
„ 7,.....	56	42	51	83	75	65	73	68	52	59
„ 8,.....	57	59	65	72	74	70	76	70	70	69
„ 9,.....	58	62	75	82	70	78	83	69	75	89
„ 10,.....	74	75	78	87	89	89	90	92	89	99
„ 11,.....	87	89	85	99	99	100	95	99	96	99
„ 12,.....	93	99	99	96	100	100	100	99	98	97
„ 13,.....	91	86	91	100	94	80	91	97	99	98
„ 14,.....	88	86	93	94	91	97	100	99	99	98
„ 15,.....	84	85	94	97	97	97	97	99	99	99
„ 16,.....	94	84	93	94	99	100	99	99	99	98
„ 17,.....	96	93	89	99	100	99	97	99	99	99
„ 18,.....	85	97	99	97	97	100	100	99	99	99
„ 19,.....	95	91	98	99	100	99	100	99	99	96
„ 20,.....	91	85	93	97	98	92	97	96	98	99
„ 21,.....	58	63	89	89	67	76	95	72	76	77
„ 22,.....	76	75	89	99	97	97	91	89	79	97
„ 23,.....	73	66	68	90	88	87	95	86	79	67
„ 24,.....	45	36	42	96	64	45	44	55	45	48
„ 25,.....	59	63	78	50	70	63	69	73	73	69
„ 26,.....	55	66	75	83	69	72	82	73	64	85
„ 27,.....	80	76	82	85	88	94	95	92	89	94
„ 28,.....	76	69	78	79	88	82	81	80	72	71
„ 29,.....	70	78	91	91	88	89	94	80	76	98
Mean, ...	77	75	82	90	88	86	89	88	86	89

TABLE V.

TENSION OF AQUEOUS VAPOUR EXPRESSED IN INCHES OF MERCURY.

Date.	Observatory.			Victoria Peak.		
	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.
1884.						
February 1,.....	0.417	0.403	0.405	0.378	0.367	0.358
„ 2,.....	0.366	0.390	0.431	0.349	0.347	0.384
„ 3,.....	0.514	0.412	0.376	0.535	0.347	0.340
„ 4,.....	0.249	0.273	0.241	0.225	0.256	0.250
„ 5,.....	0.307	0.363	0.413	0.308	0.323	0.365
„ 6,.....	0.351	0.303	0.234	0.292	0.285	0.232
„ 7,.....	0.186	0.173	0.173	0.172	0.156	0.157
„ 8,.....	0.201	0.252	0.242	0.183	0.215	0.195
„ 9,.....	0.232	0.265	0.319	0.207	0.232	0.274
„ 10,.....	0.324	0.357	0.361	0.286	0.309	0.331
„ 11,.....	0.378	0.381	0.266	0.327	0.314	0.322
„ 12,.....	0.407	0.428	0.435	0.311	0.346	0.370
„ 13,.....	0.402	0.433	0.418	0.352	0.362	0.358
„ 14,.....	0.434	0.420	0.428	0.387	0.373	0.372
„ 15,.....	0.405	0.415	0.453	0.373	0.398	0.414
„ 16,.....	0.500	0.469	0.479	0.438	0.414	0.419
„ 17,.....	0.457	0.437	0.438	0.395	0.398	0.398
„ 18,.....	0.462	0.502	0.507	0.457	0.432	0.411
„ 19,.....	0.490	0.483	0.517	0.425	0.411	0.456
„ 20,.....	0.473	0.453	0.468	0.409	0.407	0.416
„ 21,.....	0.308	0.393	0.414	0.280	0.372	0.328
„ 22,.....	0.384	0.391	0.412	0.342	0.388	0.367
„ 23,.....	0.385	0.359	0.318	0.343	0.341	0.257
„ 24,.....	0.237	0.177	0.189	0.201	0.169	0.163
„ 25,.....	0.288	0.290	0.339	0.271	0.267	0.222
„ 26,.....	0.265	0.331	0.357	0.271	0.263	0.315
„ 27,.....	0.458	0.492	0.438	0.407	0.488	0.450
„ 28,.....	0.460	0.461	0.437	0.402	0.386	0.337
„ 29,.....	0.432	0.470	0.499	0.373	0.376	0.411
Mean,.....	0.372	0.379	0.384	0.336	0.336	0.338

TABLE VI.

RAIN.

Date.	Observatory.		Stone Cutters' Island.	Victoria Peak.
	Amount.	Duration.	Amount.	Amount.
1884.	ins.	hrs.	ins.	ins.
February 1,.....	...	0	...	...
„ 2,.....	0.010	2	0.01	0.25
„ 3,.....	1.266	11	1.31	1.75
„ 4,.....	...	0	...	...
„ 5,.....	0.111	11	0.23	0.25
„ 6,.....	...	0	...	...
„ 7,.....	...	0	...	...
„ 8,.....	...	0	...	...
„ 9,.....	...	0	...	...
„ 10,.....	0.273	2	0.20	0.10
„ 11,.....	0.122	12	0.15	0.21
„ 12,.....	1.195	20	1.28	1.43
„ 13,.....	...	0	...	...
„ 14,.....	...	0	...	...
„ 15,.....	0.010	2	0.03	...
„ 16,.....	0.015	6	0.01	0.25
„ 17,.....	0.010	6	0.03	0.15
„ 18,.....	0.011	10	0.03	0.10
„ 19,.....	0.266	8	0.21	0.15
„ 20,.....	0.006	2	...	...
„ 21,.....	...	0	...	...
„ 22,.....	...	0	...	...
„ 23,.....	...	0	...	...
„ 24,.....	...	0	...	...
„ 25,.....	...	0	...	...
„ 26,.....	...	0	...	...
„ 27,.....	...	0	...	...
„ 28,.....	...	0	...	...
„ 29,.....	...	0	...	...
Total,.....	3.423	92	3.52	5.37

TABLE VII.

DIRECTION AND FORCE OF THE WIND, AND SEA DISTURBANCE.

Date.	4 a.			10 a.			4 p.			10 p.		
	Direction	Force.	Sea.	Direction	Force.	Sea.	Direction	Force.	Sea.	Direction	Force.	Sea.
1884.												
February 1	NE	5	5	ENE	5	6	ENE	4	6	E	6	6
" 2	NE	6	5	ENE	3	5	E	4	5	E	6	6
" 3	E	7	3	ESE	5	3	WNW	3	2	NNW	5	2
" 4	NNW	7	3	NNW	2	3	NNW	1	2	...	0	2
" 5	N	3	2	...	0	2	ENE	2	3	E	3	3
" 6	N	4	3	...	0	3	NNW	1	3	N	2	3
" 7	N	5	4	N	1	4	N	2	4	N	2	3
" 8	NNE	4	3	NNE	2	3	...	0	3	NNE	1	3
" 9	NE	2	3	ENE	2	3	E	3	3	ENE	5	4
" 10	ENE	6	6	ENE	4	6	ENE	3	5	ENE	4	5
" 11	ENE	3	5	ENE	4	5	ENE	4	6	ENE	4	5
" 12	ENE	5	5	ENE	3	5	ENE	1	4	...	0	4
" 13	NE	1	2	WSW	1	2	W	1	2	...	0	1
" 14	NE	1	2	E	4	4	E	4	4	ENE	5	4
" 15	ENE	5	5	E	4	5	E	3	5	ENE	4	4
" 16	E	2	2	ESE	3	2	E	3	2	E	5	4
" 17	NE	3	4	E	5	5	ENE	5	5	E	5	5
" 18	NE	4	4	E	5	4	E	3	4	E	3	4
" 19	NE	4	4	E	4	4	E	4	3	...	0	3
" 20	NE	3	3	E	3	4	E	2	3	...	0	3
" 21	N	3	2	NNE	4	2	WNW	1	2	NE	1	2
" 22	NE	1	5	E	5	5	ESE	4	4	NE	2	1
" 23	NE	2	5	NE	2	5	ESE	1	2	NNE	1	2
" 24	NE	3	2	N	1	3	N	3	3	NNE	2	2
" 25	NNE	2	3	E	3	4	ESE	4	4	ENE	3	4
" 26	NE	3	4	E	4	4	E	4	3	E	2	3
" 27	NE	3	3	E	3	3	ESE	3	3	E	3	3
" 28	NE	2	2	E	4	2	ESE	2	1	ESE	3	3
" 29	NE	1	4	ENE	6	4	E	4	3	ESE	5	3
Mean	NE	3.7	3.6	ENE	3.2	3.8	ENE	2.7	3.4	ENE	2.8	3

TABLE VIII.

DIRECTION AND FORCE OF THE WIND AT VICTORIA PEAK.

Date.	10 a.		4 p.		10 p.	
	Direction.	Force.	Direction.	Force.	Direction.	Force.
1884.						
February 1	E	5	E	6	E	5
" 2	E	5	E	5	E	6
" 3	SE	6	WNW	6	WNW	5
" 4	N	4	NW	5	NW	4
" 5	ENE	4	E	4	E	5
" 6	NW	4	NNW	4	N	4
" 7	N	4	N	5	NE	4
" 8	NE	4	NE	4	NE	3
" 9	E	4	E	4	E	4
" 10	E	6	E	5	E	4
" 11	ENE	5	E	5	E	5
" 12	E	5	NE	4	NE	4
" 13	NW	2	NW	3	NW	3
" 14	E	4	E	4	E	4
" 15	E	5	SE	3	SE	3
" 16	SSE	3	E	2	E	4
" 17	E	5	E	5	E	5
" 18	ESE	4	ESE	3	E	3
" 19	ESE	3	E	4	NE	4
" 20	E	5	E	4	NE	4
" 21	NE	5	NE	2	NE	4
" 22	E	6	E	3	E	1
" 23	ENE	4	N	3	NNE	5
" 24	NNE	5	N	4	NNE	4
" 25	E	4	ENE	4	E	4
" 26	E	4	E	4	E	4
" 27	E	4	E	4	E	3
" 28	E	4	E	3	E	3
" 29	E	6	E	5	E	6
Mean	E	4.4	ENE	4.0	ENE	4.1

TABLE IX.

AMOUNT AND CLASSIFICATION OF CLOUDS AND DIRECTION WHENCE COMING.

Date.	4 a.			10 a.			4 p.			10 p.		
	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction
1884.												
February 1, ...	10	cum-nim.	ENE	10	R-cum.	ENE	10	R-cum.	ENE	10	cum.	...
„ 2, ...	9	cum.	ENE	10	R-cum.	ENE	10	R-cum.	E	10	nim.	E
„ 3, ...	9	cum-nim.	ENE	10	cum. / cum-nim.	SSW / ESE	10	nim.	W	10	nim.	NW
„ 4, ...	8	cum.	N	5	cum.	W / NNE	0	...	...	0	...	...
„ 5, ...	5	cum.	...	7	R-cum.	WSW	10	str.	ENE	10	nim.	...
„ 6, ...	10	cum-nim.	NW	10	cum-nim.	WNW	10	R-cum.	W	1	c-cum.	SW
„ 7, ...	4	str.	NNW	0	...	...	2	cum.	N	1	c-cum.	SSW
„ 8, ...	4	c-cum.	NW	9	cum.	SSW	8	R-cum.	SW	1	c-cum.	W
„ 9, ...	5	cum.	W	9	R-cum.	W	8	c-str. / cum.	SW / W	8	c-str. / su-cum.	E
„ 10, ...	6	c-cum. / cum.	WSW / ENE	10	cum. / R-cum.	WNW / ENE	10	str.	ESE	10	str.	...
„ 11, ...	10	nim.	ENE	10	R-cum.	ENE	10	nim.	ENE	10	R-cum.	ENE
„ 12, ...	10	cum-nim.	...	10	nim.	ENE	10	nim.	...	10	nim.	...
„ 13, ...	10	nim.	...	10	R-cum.	WSW	8	cum.	N	3	c-str.	...
„ 14, ...	8	c-cum. / cum.	E	8	c-cum. / R-cum.	SSW / E	10	cum-nim.	SSW	10	nim.	ESE
„ 15, ...	10	nim.	E	10	cum-nim.	E	10	nim.	E	1	cum-nim.	E
„ 16, ...	10	nim.	...	10	cum-nim.	E	10	cum-nim.	E	10	cum-nim.	...
„ 17, ...	10	cum-nim.	E	10	nim.	...	10	nim.	...	10	nim.	...
„ 18, ...	8	cum-nim.	E	10	R-cum.	SSW	10	str.	...	10	nim.	...
„ 19, ...	10	nim.	E	10	cum-nim.	E	10	R-cum.	E	10	nim.	...
„ 20, ...	10	c-cum. / cum.	NNW / E	10	nim.	E	10	str.	E	10	nim.	...
„ 21, ...	3	c-cum.	...	0	...	...	0	...	...	0	...	...
„ 22, ...	5	cum.	E	4	R-cum.	E	5	cum.	N	10	cum.	...
„ 23, ...	9	c-cum.	...	7	su-cum. / R-cum.	WNW / ENE	6	cum.	WNW	0	...	...
„ 24, ...	2	c-cum.	W	4	su-cum.	...	10	str.	...	0	...	...
„ 25, ...	3	c-cum.	W	0	...	...	1	su-cum.	NE	0	...	...
„ 26, ...	0	...	...	0	...	...	0	...	...	9	R-cum.	ESE
„ 27, ...	2	c-cum.	W	10	R-cum.	SE	6	su-cum.	WSW	0	...	...
„ 28, ...	0	...	...	1	su-cum.	E	8	R-cum.	WSW	0	...	...
„ 29, ...	0	...	...	1	cum.	ENE	0	...	...	7	cum.	E
.....	...	...	...	...	...	...	...	...	...	...	...	...
.....	...	...	...	...	...	...	...	...	...	...	...	...
Mean,.....	6.6	...	...	7.1	...	...	7.3	...	...	6.0	...	...

Hongkong Observatory, 11th March, 1884.

W. Doberck,
Government Astronomer.

HONGKONG OBSERVATORY.

Weather Report for March, 1884.

In the *China Coast Meteorological Register*, based on information transmitted by the great Northern and the Eastern Extension Telegraph Companies, which I have published daily, is given a summary of the atmospheric circumstances in Manila and along the Coast of China as far north as Shanghai. It also contains information concerning the weather prevailing in Nagasaki and Wladiwostock.

At the beginning of the month the Barometer stood at about its mean height in these regions and Gradients were slight. Overcast weather prevailed during the month and Gradients were slighter than during preceding months except on a few days, when they indicated NE. E or SE Winds. Moderate or fresh East Gales of Wind were experienced on the 1st, 4th, 6th, 9th, 18th and 28th.

The Standard Barometer at the Observatory is placed 110 feet above Mean Sea Level. The bulbs of the Thermometers are about 109 feet above Mean Sea Level and 4 feet above the ground, except the Maximum Thermometer, which is a few inches higher, and the Terrestrial Radiation Thermometer, which is about one inch above the ground. The four Thermometers are fixed in a Stephenson Screen at a distance of 75 feet SW. of the main building, but they are placed over dry earth, as the levelled ground round the Observatory has not yet been turfed. The Barograph and Thermograph were adjusted in the course of the month. The self-recording Anemometer was started in January, but the Anemograms were not used till the 1st of March. The self-recording Rain-gauge and the Sun-shine Recorder were used from the same date.

The self-recording meteorological instruments will be described and the methods adopted in their use will be explained in my Annual Report.

At Victoria Peak, the instruments, except the Radiation Thermometers, are placed in the Look-out. The Barometer is about 1,823 feet above Sea Level. The bulbs of the Thermometers are about 4 feet above the floor, except the Maximum and the Terrestrial Radiation Thermometers, which are placed at the same height above the ground as at the Observatory. Unfortunately the Solar Radiation Thermometer was not properly placed, and the readings are therefore somewhat defective. The Barometer was not properly registered since the 12th. At Cape d'Aguilar the Thermometers are placed about 170 feet above Sea Level in a wooden screen 2 feet above the ground, except the Maximum Thermometer, which is a few inches higher.

Table I exhibits the readings of the Barometer reduced to 32.0 Fahrenheit, but not to Sea Level, at the Observatory and at Victoria Peak.

The Mean Height of the Barometer at the Observatory was 29.909. The atmospheric tide can scarcely have appreciably exceeded 0.106. The highest reading of the Barometer registered was 30.136 at 10 a. on the 12th, the lowest was 29.716 at 4 p. on the 6th.

Table II and Table III exhibit the readings of the Thermometers (Fahrenheit) at the Observatory, Cape d'Aguilar, and the Peak.

The Mean Temperature during the month was 62.3 at the Observatory, 61.15 at Cape d'Aguilar and 58.2 at the Peak. The Highest Temperature registered was 76.1 on the 27th, at the Observatory; 75.8 on the 3rd, at Cape d'Aguilar; and 69.3 on the 27th, at the Peak. The Lowest Temperature was 54.9 on the 10th, at the Observatory; 55.6 on the same day, at Cape d'Aguilar; and 47.0 on the 9th and 10th, at the Peak.

The Mean Temperature in Hongkong decreased one degree Fahrenheit for every 560 feet ascended.

Table IV exhibits the Relative Humidity in percentage of saturation (the Humidity of air saturated with moisture being 100) as determined from observations of the Dry and Damp Bulb Thermometers. The Mean Relative Humidity at the Observatory was 90, at Cape d'Aguilar 94½, at the Peak 96. The Least Relative Humidity registered at the Observatory was 68 at 10 a. on the 8th; 72 at 4 p. on the 7th at Cape d'Aguilar; and 77 at 10 a. on the 8th, and at 10 a. on the 29th at Victoria Peak.

Table V exhibits the Tension of Aqueous Vapour present in the atmosphere at the Observatory and at Victoria Peak, expressed in inches of mercury. The Mean Tension was 0.519 inches at the Observatory, and 0.486 inches at the Peak. The Greatest Tension registered at the Observatory was 0.724 at 10 a. on the 17th; and at the Peak 0.687 at 4 p. and 10 p. on the same day. The Least Tension was 0.351 at 10 a. on 29th, at the Observatory; and 0.273 at 4 p. on the 9th at the Peak.

Table VI exhibits the amount of Rain measured at different stations at 10 a. on the following day, and the Duration of Precipitation at the Observatory. The greatest amount of Rain fell on the 6th, when it rained 1.987 at the Observatory, 1.10 at Stone Cutter's Island, and 1.80 at the Peak.

Table VII exhibits the amount of Rain registered during every hour at the Observatory. The greatest hourly Rainfall was 1.345 at 3 a. on the 7th.

Table VIII exhibits the Duration of Sunshine as measured by aid of the Sunshine Recorder at every hour. The Sun shone 60½ hours during the month.

Table IX exhibits the Direction of the Wind in numbers (8=E, 16=S, 24=W, 32=N) and the Velocity of the Wind in miles per hour as measured from the Anemograms. The Mean Velocity of the Wind was 19.2 miles per hour. The Velocity was greatest at sunrise and least at sunset.

The Total Distance travelled by, as well as the Duration and average Velocity of Winds from different quarters were as follows :—

Direction.	*Total Distance.*	*Duration.*	*Velocity.*
	Miles.	Hours.	Miles per hour.
N	266	31	8.6
NE	338	39	8.7
E	13,013	608	21.4
SE	307	29	1.6
S	3	1	3.0
SW	44	4	11.0
W	219	20	11.0
NW	55	9	6.1
Calm	0	3	0.0

Table X exhibits for every hour in the day the Velocity of the Wind reduced to 4 and also to 2 Directions as well as the Mean Direction of the Wind. It appears that the Diurnal Variation was very small.

Table XI exhibits the Direction to two points and Force of the Wind (0-12) at Victoria Peak. The Mean Direction was ESE and the Force 3.9 corresponding to a Velocity of 22.5 miles per hour. The Sea Disturbance (0-9) exhibited in the same table has been derived from observations made at Cape d'Aguilar.

Table XII exhibits the Amount (0-10), Name and Direction, whence coming, of the Clouds. When the names of Upper and Lower Clouds are given, but only one Direction, this refers to the Lower Clouds. The prevailing Direction of the Wind at the Observatory, as exhibited in Table X, was E; at the Peak, as exhibited in Table XI, ESE: the prevailing Direction of the Lower Clouds was about SE and the Direction veered with increasing height, the Highest Clouds coming from W. On an average 87 per cent of the sky was clouded.

Drizzling Rain, while the instruments were being read off, was registered at the Observatory on the 1st at 10 a., the 6th at 10 a., the 9th at 10 p., the 10th at 10 a. and 4 p., the 12th at 10 a., the 17th at 10 p., the 18th at 10 a., the 19th at 4 p., the 21st at 4 p., the 22nd at 10 p., the 24th at 10 p., and the 31st at 4 p.

It was raining while the instruments were being read off on the 5th at 10 p., the 18th at 4 p., and 10 p., and the 21st at 10 p.

Dew fell on the 2nd at 10 p. and on the 20th at 10 p.

Unusual Visibility was noted on the 7th, 8th and 19th.

Fog was noted on the 15th, 16th, 17th, 26th and 31st.

Lightning and Thunder were noted on the 7th, 19th, 21st, 22nd, and 23rd, and Lightning without Thunder was observed on the 27th and 31st.

Fog prevailed extensively at Cape d'Aguilar and at Victoria Peak.

TABLE I.
BAROMETER.

Date.	Observatory.			Victoria Peak.		
	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.
1884.	ins.	ins.	ins.	ins.	ins.	ins.
h 1,.....	30.052	29.960	30.003	28.211	28.189	28.207
2,.....	29.994	29.862	29.930	28.195	28.115	28.166
3,.....	29.935	29.834	29.948	28.156	28.094	28.131
4,.....	30.017	29.912	29.989	28.198	28.129	28.191
5,.....	29.970	29.818	29.872	28.158	28.052	28.089
6,.....	29.857	29.716	29.773	28.063	27.974	27.989
7,.....	29.868	29.778	29.912	28.071	28.029	28.123
8,.....	30.039	29.938	30.015	28.199	28.144	28.149
9,.....	30.092	30.018	30.064	28.259	28.205	28.240
10,.....	30.125	30.013	30.057	28.286	28.212	28.244
11,.....	30.071	29.977	30.065	28.248	28.198	28.258
12,.....	30.136	30.074	30.122	28.304	28.300	28.315
13,.....	30.076	29.980	30.019	.....	.....	.....
14,.....	29.979	29.880	29.913	.....	.....	.....
15,.....	29.927	29.802	29.867	.....	.....	.....
16,.....	29.916	29.771	29.816	.....	.....	.....
17,.....	29.866	29.775	29.862	.....	.....	.....
18,.....	29.945	29.868	29.948	.....	.....	.....
19,.....	30.000	29.895	29.981	.....	.....	.....
20,.....	29.991	29.864	29.924	.....	.....	.....
21,.....	29.917	29.805	29.930	.....	.....	.....
22,.....	29.891	29.799	29.834	.....	.....	.....
23,.....	29.901	29.819	29.897	.....	.....	.....
24,.....	29.924	29.821	29.897	.....	.....	.....
25,.....	29.939	29.826	29.872	.....	.....	.....
26,.....	29.866	29.751	29.819	.....	.....	.....
27,.....	29.826	29.749	29.844	.....	.....	.....
28,.....	29.987	29.913	29.997	.....	.....	.....
29,.....	30.033	29.900	29.934	.....	.....	.....
30,.....	29.913	29.734	29.808	.....	.....	.....
31,.....	29.781	29.689	29.778	.....	.....	.....
Mean, ...	29.962	29.856	29.926	.....	.....	.....

TABLE II.
THERMOMETER.

Date.	Observatory.							Victoria Peak.						
	10 a.	4 p.	10 p.	Sun.	Max.	Min.	Rad.	10 a.	4 p.	10 p.	Sun.	Max.	Min.	Rad.
1884.	°	°	°	°	°	°	°	°	°	°	°	°	°	°
h 1,.....	61.2	64.9	61.6	123.6	65.5	58.3	58.1	54.8	56.1	56.2	90.2	57.1	53.2	51.5
2,.....	59.8	67.1	60.3	133.3	71.1	58.0	57.6	61.2	63.6	60.0	123.0	63.7	55.2	50.9
3,.....	67.1	68.2	64.0	137.2	70.0	57.6	57.0	60.0	60.8	59.0	123.4	61.7	57.0	52.5
4,.....	60.7	58.7	58.9	138.2	64.0	58.5	58.8	58.0	52.2	50.8	111.2	55.1	50.0	51.5
5,.....	58.0	58.0	58.2	129.9	59.9	57.1	57.1	50.8	51.8	52.8	103.0	53.1	50.0	19.5
6,.....	60.3	62.6	61.9	129.5	65.0	57.5	56.9	57.0	62.6	62.1	112.0	63.7	54.0	54.5
7,.....	65.7	67.5	64.0	135.0	69.5	60.9	60.0	56.8	58.8	53.8	122.6	61.1	53.0	53.5
8,.....	60.5	58.7	58.9	127.7	62.6	56.2	56.2	51.8	50.2	48.1	120.0	52.1	47.2	44.5
9,.....	57.2	58.3	55.9	98.8	59.3	55.3	51.9	48.8	49.0	49.1	76.2	53.1	47.0	46.3
10,.....	57.2	59.5	59.8	118.6	59.9	54.9	55.1	49.4	51.2	52.2	88.2	54.1	47.0	48.9
11,.....	61.0	66.1	64.5	120.8	68.0	59.1	59.0	57.8	58.8	57.0	110.0	61.9	52.0	52.5
12,.....	59.5	59.6	58.6	79.1	64.6	57.9	57.2	51.8	54.0	51.8	68.0	57.9	51.8	51.3
13,.....	56.8	57.0	58.9	94.6	59.0	55.7	53.9	48.2	49.2	53.8	104.0	57.3	48.2	47.5
14,.....	62.9	61.0	61.3	139.6	64.9	58.4	57.8	57.8	60.8	61.8	119.0	61.8	57.1	18.5
15,.....	63.6	65.5	64.3	125.1	66.9	60.8	60.3	61.2	63.8	63.8	126.0	64.9	57.0	59.5
16,.....	65.2	67.9	67.0	141.6	68.9	63.4	63.4	63.8	65.8	66.8	124.0	68.3	62.0	61.5
17,.....	69.7	71.9	61.6	128.7	74.0	61.2	61.4	67.8	68.2	68.2	102.0	69.1	65.8	64.5
18,.....	59.0	59.9	59.3	119.7	61.5	57.9	58.2	58.8	53.8	55.2	111.0	58.9	52.8	52.5
19,.....	58.1	58.7	58.0	83.8	59.5	56.9	56.9	52.6	52.0	54.2	83.0	58.5	52.0	51.5
20,.....	63.5	64.7	60.6	115.3	65.5	57.7	57.2	56.2	59.8	58.8	120.0	59.9	53.0	54.5
21,.....	64.6	62.5	61.9	102.9	65.2	59.9	58.8	60.2	58.8	59.8	110.2	61.7	56.0	55.7
22,.....	63.5	65.2	65.2	101.0	65.8	60.0	58.0	61.8	61.8	65.8	86.8	68.1	55.0	53.7
23,.....	67.3	66.2	66.6	127.2	68.2	64.1	63.5	61.2	65.0	64.8	116.0	66.9	62.0	62.7
24,.....	63.4	62.1	62.2	114.9	66.6	61.5	60.9	61.8	61.2	57.8	129.8	65.3	57.0	57.5
25,.....	62.0	64.9	64.1	129.3	66.1	59.9	59.7	58.2	62.8	61.8	123.0	66.9	55.0	55.5
26,.....	64.2	68.7	66.0	130.2	70.6	62.3	62.6	64.8	66.6	65.6	122.0	66.7	63.0	63.3
27,.....	71.7	72.3	67.1	132.9	76.1	65.1	64.9	67.2	67.2	66.8	119.4	69.3	66.0	63.5
28,.....	61.6	61.8	61.1	111.5	67.5	59.9	59.7	55.6	54.8	54.8	89.0	58.9	54.0	53.5
29,.....	58.8	60.0	60.6	129.8	62.0	57.5	54.5	50.6	51.8	52.8	116.0	55.1	50.0	49.3
30,.....	64.2	66.0	65.1	129.6	66.7	58.4	58.5	61.6	65.8	65.8	122.0	65.1	52.0	52.3
31,.....	64.7	66.1	67.1	111.2	67.3	63.1	63.3	65.0	66.0	68.2	107.0	68.9	63.0	62.5
Mean, ...	62.5	63.5	62.0	120.5	65.8	59.2	58.6	57.9	58.8	58.8	108.9	61.5	54.5	54.1

TABLE III.
THERMOMETER.

Date.	Cape d'Aguilar.				Max.	Min.
	4 a.	10 a.	4 p.	10 p.		
1884.	°	°	°	°	°	°
March 1	59.4	59.6	61.8	61.1	62.8	59.1
" 2	57.6	57.6	60.6	60.1	66.3	57.0
" 3	59.6	68.6	72.8	64.1	75.8	58.8
" 4	59.6	59.3	58.6	58.0	65.8	58.0
" 5	56.9	57.1	57.0	56.8	59.2	56.8
" 6	58.2	59.6	59.9	59.6	61.3	56.6
" 7	58.6	65.1	68.6	60.1	71.3	58.6
" 8	57.1	58.8	58.1	58.6	61.3	56.6
" 9	56.1	56.8	58.1	56.1	59.2	55.8
" 10	55.6	57.6	57.8	59.0	59.8	55.6
" 11	59.8	62.6	64.6	62.6	65.8	59.1
" 12	59.8	58.6	58.9	58.6	62.8	58.6
" 13	58.0	56.0	56.6	57.8	59.1	56.0
" 14	58.6	60.8	60.1	60.8	...	...
" 15	61.6	61.8	62.6	62.3	63.8	60.6
" 16	63.1	64.6	66.8	66.6	67.8	62.6
" 17	67.1	68.6	69.1	60.6	70.2	60.6
" 18	57.6	58.1	58.1	58.2	62.3	57.6
" 19	58.6	58.6	58.1	57.1	59.8	56.9
" 20	58.0	60.6	60.6	59.8	61.8	58.0
" 21	59.6	62.1	61.6	61.6	62.8	59.6
" 22	61.1	61.6	64.6	64.6	65.8	60.3
" 23	64.9	65.1	65.1	66.1	67.0	63.6
" 24	61.1	61.6	60.6	61.8	66.8	60.6
" 25	60.6	61.4	62.8	62.1	63.3	58.6
" 26	63.0	65.5	64.6	63.6	65.8	62.4
" 27	65.6	65.8	67.6	65.1	69.8	62.5
" 28	61.6	61.1	61.6	61.6	65.6	60.6
" 29	59.1	58.1	58.6	59.8	62.8	58.1
" 30	60.6	62.6	61.8	62.1	65.8	58.8
" 31	63.6	63.6	64.6	64.6	65.8	62.0
Mean,	60.2	61.3	62.1	61.0	64.6	59.0

TABLE IV.
RELATIVE HUMIDITY.

Date.	Observatory.			Cape d'Aguilar.				Victoria Peak.		
	10 a.	4 p.	10 p.	4 a.	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.
1884.										
March 1	91	78	89	98	99	90	87	99	97	97
" 2	97	86	97	98	99	96	96	88	79	97
" 3	84	79	82	99	82	73	78	95	88	96
" 4	88	90	87	96	92	90	94	97	97	98
" 5	92	96	99	95	93	91	100	99	99	99
" 6	97	92	99	96	99	98	100	99	99	99
" 7	79	72	74	100	75	72	76	99	99	98
" 8	68	88	92	86	79	86	94	77	97	98
" 9	75	90	87	86	82	77	93	83	78	95
" 10	88	81	88	96	93	92	98	99	95	96
" 11	85	87	86	92	88	88	96	97	99	98
" 12	98	94	91	100	99	98	96	99	99	98
" 13	81	83	88	89	94	92	95	99	99	98
" 14	85	94	97	96	89	99	99	99	99	98
" 15	95	95	99	100	98	99	100	99	99	98
" 16	99	95	100	100	99	96	100	99	99	98
" 17	99	90	99	100	99	99	99	99	99	98
" 18	95	96	97	99	99	99	99	99	99	98
" 19	94	91	94	99	98	99	99	99	99	98
" 20	83	89	96	97	90	96	95	99	99	98
" 21	92	97	98	99	93	96	98	99	99	98
" 22	85	91	92	95	92	91	97	99	99	98
" 23	96	98	97	99	99	99	96	99	99	98
" 24	98	95	94	99	99	99	95	99	99	98
" 25	90	93	97	96	92	95	99	99	99	98
" 26	99	94	100	100	97	96	100	99	97	98
" 27	91	90	100	99	99	98	100	97	97	98
" 28	85	83	80	96	87	96	92	99	99	98
" 29	70	75	82	90	76	84	95	77	86	98
" 30	81	89	96	91	92	91	99	95	99	98
" 31	99	99	95	99	100	99	100	99	98	98
Mean,	89	89	93	96	93	93	96	96	96	98

TABLE V.

TENSION OF AQUEOUS VAPOUR EXPRESSED IN INCHES OF MERCURY.

Date.	Observatory.			Victoria Peak.		
	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.
1884.						
1,.....	0.496	0.483	0.489	0.428	0.442	0.394
2,.....	0.503	0.569	0.530	0.476	0.464	0.450
3,.....	0.560	0.548	0.489	0.491	0.469	0.468
4,.....	0.467	0.444	0.432	0.390	0.379	0.370
5,.....	0.445	0.462	0.485	0.370	0.384	0.393
6,.....	0.513	0.520	0.553	0.464	0.566	0.562
7,.....	0.499	0.481	0.386	0.461	0.436	0.348
8,.....	0.359	0.435	0.460	0.297	0.352	0.339
9,.....	0.354	0.365	0.388	0.290	0.273	0.336
10,.....	0.414	0.412	0.451	0.352	0.371	0.389
11,.....	0.508	0.562	0.527	0.465	0.495	0.464
12,.....	0.500	0.478	0.446	0.428	0.416	0.384
13,.....	0.376	0.388	0.436	0.336	0.349	0.413
14,.....	0.490	0.508	0.530	0.478	0.532	0.551
15,.....	0.556	0.594	0.597	0.539	0.590	0.590
16,.....	0.620	0.651	0.663	0.590	0.632	0.655
17,.....	0.724	0.706	0.543	0.678	0.687	0.687
18,.....	0.477	0.477	0.488	0.495	0.413	0.435
19,.....	0.455	0.453	0.453	0.395	0.387	0.402
20,.....	0.486	0.525	0.510	0.451	0.483	0.489
21,.....	0.556	0.548	0.546	0.520	0.495	0.513
22,.....	0.496	0.564	0.574	0.551	0.551	0.633
23,.....	0.644	0.657	0.636	0.599	0.615	0.611
24,.....	0.575	0.540	0.526	0.551	0.539	0.478
25,.....	0.500	0.572	0.585	0.485	0.570	0.611
26,.....	0.599	0.637	0.641	0.611	0.639	0.600
27,.....	0.709	0.715	0.665	0.650	0.650	0.655
28,.....	0.470	0.455	0.430	0.441	0.428	0.428
29,.....	0.351	0.388	0.434	0.287	0.332	0.398
30,.....	0.486	0.574	0.593	0.521	0.591	0.591
31,.....	0.610	0.636	0.629	0.615	0.631	0.681
Mean,.....	0.509	0.529	0.519	0.475	0.489	0.494

TABLE VI.

RAIN.

Date.	Observatory.		Stone Cutters' Island.	Victoria Peak.
	Amount.	Duration.	Amount.	Amount.
1884.	ins.	hrs.	ins.	ins.
1,.....	...	0	...	...
2,.....	...	0	...	...
3,.....	...	0	...	...
4,.....	...	0	...	...
5,.....	...	2	...	0.05
6,.....	1.987	5	1.40	1.80
7,.....	...	0	...	...
8,.....	0.030	3	0.04	...
9,.....	...	0	...	...
10,.....	...	1	...	...
11,.....	0.064	4	0.09	0.16
12,.....	0.020	2	0.02	...
13,.....	...	0	...	...
14,.....	...	0	...	...
15,.....	...	0	...	...
16,.....	...	0	...	...
17,.....	...	2	...	...
18,.....	0.635	5	0.63	0.68
19,.....	0.561	5	0.47	0.70
20,.....	...	0	...	...
21,.....	0.300	6	0.30	0.25
22,.....	1.425	7	1.80	0.95
23,.....	...	0	...	...
24,.....	...	3	...	...
25,.....	...	0	...	...
26,.....	...	0	...	...
27,.....	...	0	...	0.25
28,.....	0.035	2	...	...
29,.....	...	0	...	...
30,.....	...	0	...	...
31,.....	0.770	3	0.81	0.61
Total,.....	5.827	50	5.56	5.45

TABLE VII.

RAINFALL FOR THE MONTH OF MARCH, 1884.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Sums.
March 1,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 2,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 3,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 4,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 5,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 6,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 7,	0·090	0·065	1·345	0·268	0·047	0·103	0·069	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1·987
„ 8,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 9,	...	...	...	...	0·020	0·010	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·030
„ 10,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 11,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 12,	...	...	...	...	...	...	0·030	0·015	0·010	0·009	...	...	...	...	...	...	...	...	...	...	0·020	...	...	...	0·084
„ 13,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 14,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 15,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 16,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 17,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 18,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·008	0·432	0·150	...	...	...	0·015	...	0·023	0·628
„ 19,	0·007	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·410	0·100	0·005	0·015	0·031	...	...	...	0·568
„ 20,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 21,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·050	0·175	0·070	0·005	...	0·300
„ 22,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·065	0·045	...	...	...	...	...	...	0·490	0·420	1·020
„ 23,	0·035	0·005	0·030	...	...	...	...	...	0·335	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·405
„ 24,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 25,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 26,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 27,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 28,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 29,	...	...	...	...	0·025	0·010	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·035
„ 30,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 31,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·010	...	...	...	0·560	0·170	...	...	...	0·770
Sums,	0.132	0·070	1·375	0·268	0·092	0·123	0·099	0·015	0·345	0·009	...	...	...	...	0·065	0·093	0·842	0·250	0·005	0·625	0·396	0·085	0·495	0·443	5·827

TABLE VIII.

DURATION OF SUNSHINE.

Date.	6 a.	7 a.	8 a.	9 a.	10 a	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	Sums.
1884.														
rch 1,.....	...	...	...	...	0.1	...	...	0.1	...	1.0	0.8	0.1	...	2.1
2,.....	...	...	...	...	...	0.9	1.0	1.0	1.0	1.0	1.0	0.4	...	6.3
3,.....	...	0.3	1.0	1.0	0.9	1.0	1.0	1.0	1.0	1.0	1.0	0.3	...	9.5
4,.....	...	...	...	...	0.4	0.8	0.9	1.0	1.0	0.8	0.1	...	...	5.0
5,.....	...	...	...	...	...	...	0.5	0.3	...	...	...	...	...	0.8
6,.....	...	...	...	...	...	...	0.4	0.1	1.0	0.4	...	...	...	1.9
7,.....	...	...	...	0.1	0.7	0.8	0.7	0.3	0.8	0.7	...	...	...	4.1
8,.....	...	...	...	...	0.1	0.4	0.2	...	...	...	...	...	...	0.7
9,.....	...	...	...	...	...	...	...	...	...	...	...	...	...	0.0
10,.....	...	...	...	...	0.2	...	...	...	...	...	...	...	...	0.2
11,.....	...	...	...	...	...	...	0.1	...	...	...	0.1	...	...	0.2
12,.....	...	...	...	...	...	...	...	...	...	...	...	...	...	0.0
13,.....	...	...	...	...	...	...	...	...	...	...	...	...	...	0.0
14,.....	...	...	...	...	0.5	0.6	0.3	0.9	...	...	...	...	...	2.3
15,.....	...	...	...	...	...	...	0.3	0.4	0.4	0.3	0.9	0.2	...	2.2
16,.....	...	...	...	...	0.1	0.4	1.0	1.0	1.0	0.4	...	...	...	3.9
17,.....	...	...	...	...	...	0.1	0.1	0.3	0.3	0.2	0.2	...	...	1.2
18,.....	...	...	...	...	...	...	...	...	...	...	...	...	...	0.0
19,.....	...	...	...	...	...	...	...	...	...	...	...	...	...	0.0
20,.....	...	...	...	...	...	...	...	...	0.3	0.3	0.8	...	...	1.4
21,.....	...	...	...	...	...	...	...	...	...	...	...	...	...	0.0
22,.....	...	...	...	...	...	...	...	...	...	...	...	...	...	0.0
23,.....	...	...	...	...	0.5	...	...	0.1	...	...	...	...	...	0.6
24,.....	...	...	...	...	...	...	...	...	...	...	...	...	...	0.0
25,.....	...	...	...	...	...	...	...	0.7	1.0	0.9	...	...	...	2.6
26,.....	...	...	...	...	...	...	...	...	1.0	0.9	0.6	...	...	2.5
27,.....	...	...	0.8	0.6	0.9	0.3	0.4	0.7	1.0	0.6	...	...	...	5.3
28,.....	...	...	...	...	...	...	...	...	...	...	...	...	...	0.0
29,.....	...	...	...	...	...	0.3	0.5	0.1	0.9	0.2	...	...	...	2.0
30,.....	...	...	...	...	0.1	1.0	1.0	1.0	0.8	1.0	0.1	...	...	5.6
31,.....	...	...	...	...	...	...	...	0.1	...	...	...	...	...	0.1
Sums.....	...	0.3	1.8	1.7	4.8	6.6	8.4	9.1	11.2	9.7	5.9	1.0	...	60.5
nly Mean,...	...	0.01	0.06	0.05	0.15	0.21	0.27	0.29	0.36	0.31	0.19	0.03	...	1.95

TABLE IX.

DIRECTION AND VELOCITY OF THE WIND, FOR THE MONTH OF MARCH, 1884.

Date.	1 a.		2 a.		3 a.		4 a.		5 a.		6 a.		7 a.		8 a.		9 a.		10 a.		11 a.		Noon.		1 p.		2 p.		3 p.		4 p.		5 p.		6 p.		7 p.		8 p.		9 p.		10 p.		11 p.		Midt.		Sums.	Daily and Monthly Means.
	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.		
March 1,	7	40	7	40	7	38	7	37	8	33	7	34	8	35	8	36	7	29	7	27	7	30	7	24	7	19	9	20	7	18	8	15	6	12	7	10	10	11	10	11	10	9	10	6	9	7	10	11	552	23.0
" 2,	11	14	10	14	10	15	10	15	10	14	9	16	9	17	9	22	10	19	10	17	7	14	8	6	25	5	27	4	9	6	30	5	29	6	31	4	3	4	32	3	31	3	—	0	8	3	—	0	226	9.4
" 3,	6	2	—	0	8	3	8	2	2	2	1	3	1	2	29	3	25	7	24	12	22	18	23	19	23	18	24	20	23	22	24	19	22	18	22	14	22	5	1	5	28	5	28	4	26	2	25	2	207	8.6
" 4,	25	2	12	11	8	22	7	29	7	26	7	30	7	29	7	30	7	25	7	30	7	30	7	30	7	37	7	33	7	29	7	29	8	26	8	22	8	20	8	23	7	20	7	22	7	22	7	22	599	25.0
" 5,	7	20	8	19	7	26	7	24	7	23	7	23	7	24	7	26	7	26	7	28	8	30	8	29	7	29	8	29	7	28	8	29	7	26	7	30	7	25	7	25	8	27	8	30	8	29	8	30	635	26.5
" 6,	7	30	8	30	7	30	8	40	8	30	8	34	8	34	8	30	7	24	7	20	8	29	8	23	8	26	8	24	8	26	8	22	8	22	8	23	8	26	8	25	8	24	8	20	8	15	7	16	623	26.0
" 7,	8	14	5	12	32	9	27	9	21	10	24	8	31	12	1	15	3	9	1	12	32	12	24	10	21	7	25	13	26	13	31	12	1	16	1	13	2	12	2	11	1	8	1	5	1	5	1	8	255	10.6
" 8,	1	5	4	11	1	14	1	9	1	13	2	14	1	9	2	12	2	5	8	5	7	13	8	17	9	24	9	17	8	16	7	20	8	21	7	28	7	26	7	26	7	26	7	30	7	29	7	30	420	17.5
" 9,	7	37	7	36	7	34	7	30	8	32	7	33	7	35	7	33	7	30	6	25	7	25	6	20	7	24	7	21	7	23	7	19	7	15	7	16	7	19	7	26	7	26	7	28	7	27	7	27	641	26.7
" 10,	7	28	6	21	5	23	7	28	7	30	7	35	7	36	8	30	7	28	7	22	8	25	7	25	8	23	8	22	8	24	8	22	8	24	8	20	8	20	8	20	8	20	8	19	9	16	8	20	581	24.2
" 11,	8	20	8	20	8	22	8	15	8	18	8	20	9	18	8	18	8	15	10	13	9	18	9	9	9	7	26	8	26	9	25	9	24	8	24	2	2	9	4	8	2	5	2	2	2	8	2	6	287	12.0
" 12,	6	3	3	2	3	2	3	5	4	10	7	17	7	19	6	19	7	20	8	18	7	23	7	23	7	16	7	14	5	8	8	14	8	15	8	17	7	15	8	22	8	23	8	23	8	22	8	25	375	15.6
" 13,	8	28	7	31	7	37	7	29	7	28	7	30	7	34	7	33	7	30	7	33	7	35	7	31	8	34	7	30	7	28	7	24	7	14	9	23	8	24	7	25	8	22	8	24	8	30	8	28	685	28.5
" 14,	7	22	8	20	8	29	9	26	8	30	8	30	8	29	8	30	7	23	8	24	8	27	8	22	8	26	8	24	8	26	9	26	8	24	8	24	8	24	8	25	8	20	8	18	8	20	9	20	589	24.5
" 15,	9	23	9	23	9	21	9	19	8	16	9	18	10	18	8	25	10	20	9	16	9	21	9	21	9	19	9	19	8	19	9	20	9	19	9	19	9	18	9	15	9	18	9	12	8	13	8	17	449	18.7
" 16,	8	18	8	15	8	16	8	25	8	22	8	27	9	24	8	25	8	24	8	23	8	25	8	25	9	28	9	28	9	25	9	20	8	12	8	10	7	10	7	10	7	12	7	9	7	8	8	11	455	19.0
" 17,	7	10	7	7	7	7	7	5	7	7	7	7	7	8	7	11	7	7	8	4	13	5	13	4	13	7	13	5	13	2	13	5	13	6	13	7	13	10	13	17	8	30	8	36	8	38	8	36	281	11.7
" 18,	8	33	8	37	8	36	8	39	8	38	8	32	8	34	8	32	7	32	8	31	7	35	7	35	7	35	8	35	7	31	7	30	7	13	10	27	8	20	8	20	8	23	8	20	9	17	8	13	698	29.1
" 19,	8	16	8	14	8	15	7	14	7	14	4	10	5	10	7	13	6	13	1	5	6	5	9	12	6	7	3	5	8	13	10	14	30	12	9	10	6	7	6	4	3	4	7	11	8	11	7	8	247	10.3
" 20,	8	10	5	4	8	5	9	8	9	10	8	8	9	8	9	9	9	8	9	11	9	10	9	6	9	8	9	12	8	12	8	14	7	11	5	6	5	4	5	2	5	3	5	2	7	14	8	12	197	8.2
" 21,	9	8	9	8	10	6	10	3	6	7	8	10	8	13	7	18	8	19	7	16	8	23	8	25	8	29	8	29	8	25	8	30	8	30	8	29	8	30	8	27	8	25	7	13	6	10	10	25	458	19.1
" 22,	8	24	8	27	8	24	8	25	8	28	8	26	8	25	8	25	8	20	8	17	10	19	8	21	8	28	8	25	8	19	9	27	10	25	10	25	8	25	8	27	9	30	7	26	8	8	11	4	550	22.9
" 23,	12	5	9	8	10	13	8	22	8	24	9	21	9	19	9	21	9	20	8	18	8	23	8	21	8	20	9	15	9	18	9	19	9	14	8	14	9	16	9	12	9	10	9	12	9	11	9	10	386	16.1
" 24,	9	8	9	11	9	17	9	18	10	21	8	21	8	28	8	26	8	22	8	21	8	29	9	28	8	27	8	30	8	26	8	26	8	27	8	30	8	28	7	22	7	24	8	26	8	27	8	26	569	23.7
" 25,	8	27	8	28	8	28	7	29	7	27	7	23	7	20	8	20	8	27	7	23	8	20	8	20	8	20	8	22	8	20	8	21	8	21	8	20	8	17	9	16	8	19	8	19	8	20	8	20	527	22.0
" 26,	8	18	8	20	8	24	8	23	7	20	8	21	8	17	7	18	7	14	7	8	8	9	6	6	6	9	7	12	8	12	9	10	9	11	8	10	8	10	8	10	8	8	8	9	8	8	8	4	311	13.0
" 27,	8	4	8	2	8	7	8	5	8	4	8	10	8	14	8	10	8	9	8	7	7	10	8	10	8	7	8	10	13	9	13	5	13	3	11	6	9	9	8	9	8	16	7	17	8	20	8	29	232	9.7
" 28,	9	35	9	40	8	45	8	36	7	29	7	27	7	28	7	25	7	24	7	23	7	23	7	22	7	21	7	19	8	25	7	23	7	22	7	18	7	23	7	25	7	30	7	32	7	35	7	39	669	27.9
" 29,	7	35	7	35	7	35	7	30	6	24	6	16	6	16	7	23	8	29	8	28	7	30	8	25	8	29	7	27	8	28	8	27	8	24	7	28	7	26	7	25	7	30	7	26	7	25	7	20	641	26.7
" 30,	8	20	8	21	8	26	7	25	9	23	8	31	8	30	8	24	7	25	8	25	9	30	8	29	8	22	7	24	7	17	7	14	8	18	8	15	8	17	8	16	8	14	8	20	8	28	8	27	511	22.5
" 31,	8	25	8	25	8	23	8	19	7	15	7	12	7	14	7	16	8	20	8	15	8	22	8	18	8	15	8	11	7	12	7	10	7	8	7	10	7	11	7	8	6	8	4	8	4	16	2	15	359	15.0
Sums,	...	584	...	595	...	632	...	643	...	628	...	647	...	659	...	678	...	623	...	577	...	668	...	616	...	626	...	610	...	589	...	580	...	523	...	530	...	521	...	520	...	542	...	529	...	544	...	561	14,245	593.7
Hourly Means,	...	18.8	...	19.2	...	21.0	...	20.7	...	20.3	...	20.9	...	21.3	...	21.9	...	20.1	...	18.0	...	21.5	...	19.9	...	20.2	...	19.7	...	19.0	...	18.7	...	16.9	...	17.1	...	16.8	...	16.8	...	17.5	...	17.1	...	17.5	...	18.1	59.5	19.2

TABLE X.

MEAN HOURLY COMPONENTS AND MEAN DIRECTION OF THE WIND, FOR MARCH, 1884.

Hour.	Components (miles per hour).						Direction.
	N	E	S	W	+ N-S	+ E-W	
1 a.	0.2	18.4	0.4	0.1	— 0.2	+ 18.3	E 1° S
2 „	0.9	18.6	0.4	0.0	+ 0.5	+ 18.6	E 2° N
3 „	1.3	19.9	0.4	0.0	+ 0.9	+ 19.9	E 3° N
4 „	0.6	20.0	0.2	0.2	+ 0.4	+ 19.8	E 1° N
5 „	1.1	19.1	0.8	0.2	+ 0.3	+ 18.9	E 1° N
6 „	0.9	20.1	0.0	0.3	+ 0.9	+ 19.8	E 3° N
7 „	1.2	20.3	0.2	0.0	+ 1.0	+ 20.3	E 3° N
8 „	1.1	20.9	0.0	0.1	+ 1.1	+ 20.8	E 3° N
9 „	0.5	19.5	0.5	0.2	0.0	+ 19.3	E
10 „	0.9	17.4	0.3	0.4	+ 0.6	+ 17.0	E 2° N
11 „	0.5	20.4	0.5	0.5	0.0	+ 19.9	E
Noon.	0.3	18.8	0.1	0.9	+ 0.2	+ 17.9	E 1° N
1 p.	0.2	19.1	0.3	0.9	— 0.1	+ 18.2	E
2 „	0.3	18.1	0.1	1.4	+ 0.2	+ 16.7	E 1° N
3 „	0.4	17.4	0.3	1.3	+ 0.1	+ 16.1	E 1° N
4 „	0.4	17.1	0.4	1.0	0.0	+ 16.1	E
5 „	1.1	14.6	0.7	0.8	+ 0.4	+ 13.8	E 2° N
6 „	0.7	15.5	1.1	0.5	— 0.4	+ 15.0	E 1° S
7 „	0.8	15.9	0.4	0.1	+ 0.4	+ 15.8	E 1° N
8 „	0.7	15.9	0.5	0.0	+ 0.2	+ 15.9	E 1° N
9 „	0.8	16.7	0.1	0.1	+ 0.7	+ 16.6	E 3° N
10 „	0.5	16.6	0.1	0.1	+ 0.4	+ 16.5	E 2° N
11 „	0.9	17.0	0.0	0.1	+ 0.9	+ 16.9	E 3° N
Midt.	0.8	17.1	0.5	0.1	+ 0.3	+ 17.0	E 1° N
Mean,.....	0.71	18.10	0.33	0.39	0.38	17.71	E 1° N

TABLE XI.

DIRECTION AND FORCE OF THE WIND, AT VICTORIA PEAK, AND SEA DISTURBANCE.

Date.	4 a.			10 a.			4 p.			10 p.		
	Direction	Force.	Sea.	Direction	Force.	Sea.	Direction	Force.	Sea.	Direction	Force.	Sea.
1884.												
eh 1,.....	...	...	5	E	6	5	E	3	4	E	3	3
2,.....	...	...	3	SE	2	3	S	2	1	SW	3	0
3,.....	...	...	0	NW	3	0	NW	4	0	NW	4	0
4,.....	...	...	5	E	6	6	E	5	6	E	5	5
5,.....	...	...	5	E	5	5	E	4	5	E	5	5
6,.....	...	...	4	E	6	4	SE	6	4	SE	6	3
7,.....	...	...	3	N	4	3	NW	4	2	ENE	4	3
8,.....	...	...	3	NE	3	3	E	5	4	E	5	5
9,.....	...	...	6	E	6	6	E	5	6	E	5	6
10,.....	...	...	6	E	5	6	E	5	6	E	4	6
11,.....	...	...	4	ESE	4	4	ESE	2	4	NE	4	3
12,.....	...	...	6	E	4	6	E	4	5	E	4	5
13,.....	...	...	6	E	5	6	E	5	5	E	4	5
14,.....	...	...	4	SE	5	4	SE	5	3	SE	3	3
15,.....	...	...	3	SE	4	3	SSE	5	2	SE	4	1
16,.....	...	...	0	SE	5	0	S	5	0	S	4	0
17,.....	...	...	0	SSE	5	0	S	3	0	S	4	0
18,.....	...	...	5	E	5	6	E	4	5	E	5	5
19,.....	...	...	5	ESE	4	5	E	2	4	E	2	4
20,.....	...	...	3	NE	3	3	ENE	1	3	E	2	2
21,.....	...	...	3	SE	3	4	E	4	4	E	5	4
22,.....	...	...	4	ESE	5	4	SE	5	4	SE	5	3
23,.....	...	...	2	NW	1	2	NW	1	2	E	1	2
24,.....	...	...	4	E	2	4	SE	4	5	SE	3	5
25,.....	...	...	5	E	5	5	SE	5	5	SE	4	5
26,.....	...	...	3	SSE	4	2	SSE	4	2	SSE	2	1
27,.....	...	...	1	SSW	4	1	S	4	1	S	4	1
28,.....	...	...	5	E	5	6	E	5	5	E	5	6
29,.....	...	...	5	E	5	6	E	5	5	E	5	6
30,.....	...	...	5	SE	5	5	SE	5	4	S	4	4
31,.....	...	...	3	SSE	4	2	S	4	2	S	3	1
Mean,.....	...	...	3.7	ESE by E	4.3	3.8	ESE	4.0	3.5	ESE	3.9	3.3

TABLE XII.

AMOUNT AND CLASSIFICATION OF CLOUDS AND DIRECTION WHENCE COMING.

Date.	4 a.			10 a.			4 p.			10 p.		
	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Dir
1884.												
March 1, ...	10	nim.	E	10	nim.	E	6	R-cum.	SE	0	...	
„ 2, ...	2	str.	E	10	cum-nim.	...	1	c-cum.	...	0	...	
„ 3, ...	3	c-cum.	WSW	5	c-cum.	W	0	...	...	9	cum.	W
„ 4, ...	7	c-cum.	E	10	cum-nim.	E	10	cum. / R-cum.	WSW / E	10	cum-nim.	E
„ 5, ...	9	cum-nim.	E	10	R-cum.	E	10	R-cum.	E	10	nim.	
„ 6, ...	10	cum-nim.	E	10	nim.	E	10	cum-nim.	S	10	nim.	
„ 7, ...	10	nim.	E	8	R-cum.	E	10	R-cum.	NW	10	R-cum.	W
„ 8, ...	8	R-cum.	E	10	R-cum.	...	10	R-cum.	E	10	cum-nim.	E
„ 9, ...	10	cum-nim.	E	10	str.	...	10	R-cum.	...	10	cum-nim.	E
„ 10, ...	10	cum-nim.	E	10	nim.	E	10	nim.	SE	10	R-cum.	
„ 11, ...	10	cum-nim.	E	10	str.	...	10	str.	...	10	str.	E
„ 12, ...	10	cum-nim.	E	10	nim.	...	10	cum-nim.	E	10	nim.	E
„ 13, ...	10	R-cum.	E	10	str.	SE	10	str.	...	9	cum.	
„ 14, ...	8	cum.	E	10	R-cum.	E	10	nim.	E	10	cum-nim.	
„ 15, ...	6	cum.	E	10	cum-nim.	E	8	cum.	ESE	10	cum.	
„ 16, ...	8	cum-nim.	E	10	str.	SE	9	nim.	SE	...	...	
„ 17, ...	...	...	...	10	cum.	SSW	10	R-cum.	SSW	10	nim.	
„ 18, ...	8	cum-nim.	E	10	nim.	E	10	nim.	E	10	nim.	
„ 19, ...	10	cum-nim.	E	10	cum-nim.	NE	10	nim.	NE	10	cum-nim.	
„ 20, ...	10	cum-nim.	...	10	R-cum.	ENE	7	c-cum. / cum.	SW / NE	2	cum.	
„ 21, ...	0	...	...	10	R-cum.	ESE	10	nim.	SE	10	nim.	
„ 22, ...	10	cum-nim.	E	10	R-cum.	SE	10	cum-nim.	SE	10	nim.	
„ 23, ...	10	cum-nim.	...	9	cum. / cum-nim.	SW / E	10	cum-nim.	SE	5	cum-nim.	
„ 24, ...	3	cum-nim.	E	10	cum-nim.	E	10	str.	...	10	nim.	
„ 25, ...	...	...	...	10	R-cum.	E	9	R-cum.	SSE	10	cum.	
„ 26, ...	3	R-cum.	E	10	R-cum.	SSW	6	cum.	SW	4	cum.	
„ 27, ...	...	...	...	6	cum.	SW	10	cum.	WSW	10	cum.	
„ 28, ...	10	cum-nim.	S	10	R-cum.	ENE	10	R-cum.	ENE	10	cum.	
„ 29, ...	10	cum-nim.	E	10	R-cum.	SE	10	R-cum.	SE	10	str.	
„ 30, ...	10	...	...	6	c-cum. / cum.	WSW / ESE	6	cum.	...	10	cum.	
„ 31, ...	10	cum-nim.	...	10	str.	...	10	nim.	...	10	cum-nim.	
Mean, ...	8.0	...	...	9.5	...	...	8.8	...	...	8.6	...	

Hongkong Observatory, 22nd April, 1884.

W. Doberck,
Government Astronom

HONGKONG OBSERVATORY.

Weather Report for April, 1884.

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in the *China Coast Meteorological Register*, based on information transmitted by the Great hern and the Eastern Extension Telegraph Companies—which I have published daily, is a summary of the atmospheric circumstances in Manila and along the Coast of China as orth as Shanghai. It also contains information concerning the weather prevailing in Nagasaki Vladiwostock.

At the beginning of the month the Barometer was rising and the Temperature and Humidity g. Gradients indicated moderate Easterly winds, which rose to a NE. gale accompanied by a sea and rainy weather. On the 3rd a change set in, the Barometer fell, the Temperature and idity rose, and gradients indicated light winds. The Barometer continued low, the Temperature rising, and rainy weather, with much fog at sea, continued up to the 7th. Gradients indicated calms ght Westerly winds. On the 7th the Barometer began to rise, the Temperature and Humidity fell, Gradients indicated Easterly winds. Fresh NE. breezes were followed by a high sea on the 9th and at a distance from the shore. On the 10th the Barometer fell and continued thereafter steady the 20th. The Temperature rose on the same day. Gradients indicated calms or light winds. sky was overcast from the beginning of the month up to the 15th, when it cleared partly. On 20th the Barometer fell (but rose again on the 22nd) and the Temperature and Humidity rose. was followed by light winds, with much fog at sea. Gradients indicated light Westerly winds up e 27th. On the 27th the Barometer rose, the Temperature and Humidity fell, and the wind rose gale from NE. indicated by the Gradients. On the 28th, the wind calmed down and the Barome- ell.

The Barograph and the Standard Barometer at the Observatory are placed 110 feet above Mean Level. The bulbs of the Thermograph Thermometers are 111 feet above Mean Sea Level and 6 above the ground. They are exposed in an unpainted and double-louvered zinc screen fixed to north wall of the main building in a shaded position. The Solar Radiation Maximum Thermome- s 109 feet above Mean Sea Level and 4 feet above the ground, and the Terrestrial Radiation Mini- Thermometer is about one inch above the ground. They are placed over dry earth, as the ground d the Observatory has not yet been turfed. The self-recording Rain-gauge is placed 106 feet e Mean Sea Level, and the rim, which is 11¼ inches in diameter, is 21 inches above the ground. cups of the Anemograph are 45 feet above the ground, and 150 feet above Mean Sea Level.

At Victoria Peak the Instruments, except the Radiation Thermometers, are placed in the Look- The Barometer is about 1823 feet above Sea Level. The bulbs of the Thermometers are about et above the floor, except the Maximum Thermometer, which is a few inches higher. The Radia- Thermometers, are placed at the same height above the ground as at the Observatory. At Cape guilar the Thermometers are placed about 170 feet above Sea Level (according to the *Government ette*) in a wooden screen 2 feet above the ground, except the Maximum Thermometer, which is a inches higher.

Table I exhibits the hourly readings of the height of the Barometer reduced to 32.0 Fahrenheit, not to Sea Level, as measured (at two minutes to the hour named) from the Barograms. The h Height of the Barometer was 29.868, the Highest was 30.040 at 10 a. on the 2nd, and the Lowest 29.621 at 4 p. on the 21st. The Barometric Tide amounted to 0.084.

Table II exhibits the hourly readings of the Temperature (Dry Bulb Thermometer) as meas from the Thermograms (at two minutes past the hour named), and also the Extreme Temperatu during the day. The Mean Temperature was 67.8, the Highest was 83.9 at 1 h. 18 m., p. on the 2 and the Lowest was 51.7 at 2 h. 47 m., a. on the 2nd.

Table III exhibits the hourly readings of the Temperature of Evaporation (Damp Bulb Ther meter) as measured from the Thermograms (at two minutes past the hour named) and also the S Radiation Maximum (Black Bulb) and Terrestrial Radiation Minimum, Temperatures.

Table IV exhibits the Mean Relative Humidity in percentage of saturation (the humidity of saturated with moisture being 100) and the Mean Tension of Aqueous Vapour present in the air expres in inches of mercury, for every hour in the day and for every day in the month. The Mean Tens which did not vary much during the 24 hours, being however somewhat greater during the hot than during coldest part of the day, was 0.594. The Mean Relative Humidity, which exhibits a gr daily variation, was 86. It appears from this that while the amount of vapour remained nea constant, the air was further removed from saturation during the hottest part of the day, than dur the early morning hours.

Table V exhibits the Duration of Sun-shine as recorded by aid of the Sun-shine Recorder fr half an hour before to half an hour after the hour named. The Sun shone 79.7 hours during t month.

Table VI exhibits the amount of Rain registered from half an hour before to half an hour af the hour named. The Total Rain-fall during the month was 5.261 inches. The greatest Hou Rain-fall was 1.055 at 9 a. on the 12th.

Table VII exhibits, for every hour in the day, the Velocity of the Wind and its Direction numbers (8=E, 16=S, 24=W, 32=N) as measured from the Anemograms. The Velocity is t number of miles traversed by the Wind from half an hour before to half an hour after the hour nam The Direction is read off at the hour, except when the Wind is very light and changeable, wh the average Direction during the hour is estimated, taking into account the Velocity from differe quarters. The Direction is not noted when the Velocity is below 1.5 miles an hour.

The Mean Velocity was 16.5 miles an hour. It was greatest during the middle of the day. T Velocity exceeded 35 miles an hour on the 2nd and the 27th.

The Total Distance travelled by, as well as the Duration and average Velocity of Winds fr different quarters were as follows:—

Direction.	*Total Distance.*	*Duration.*	*Velocity.*
	Miles.	Hours.	Miles per hour.
N	353	36	9.8
NE	547	46	11.9
E	9,921	511	19.4
SE	277	22	12.6
S	284	26	10.9
SW	133	14	9.5
W	175	26	6.7
NW	158	25	6.3
Calm	5	14	0.4

Table VIII exhibits, for every hour in the day, the Velocity of the Wind reduced to 4 and also t 2 Directions, as well as the Mean Direction of the Wind. The Diurnal Variation of the latter w very small.

Table IX exhibits the Direction (to two points) and Force of the Wind (0-12) at Victoria Pea The Average Force of the Wind was 4.0, corresponding to a Velocity of 23 miles per hour. The Se Disturbance (0-9) exhibited in the same table has been derived from observations made at Ca d'Aguilar.

Table X exhibits the Amount (0-10), Name and Direction, whence coming, of the Clouds. Where the names of Upper and Lower Clouds are given, but only one Direction, this refers to the Lower Clouds. The prevailing Direction of the Wind at the Observatory, as shewn in Table VIII, was E; at the Peak, as shewn in Table IX, ESE; that of the Lower Clouds was SE and the Direction veered with increasing height, the highest clouds coming from W. On an average 81 per cent of the sky was clouded.

Table XI and Table XII exhibit the readings of the Barometer and the Thermometers at Victoria Peak and at Cape d'Aguilar. The Barometer was not properly registered till the 19th.

The Mean Temperature was 62.6 at the Peak and 65.9 at Cape d'Aguilar, the Highest was 75.9 on the 22nd at the Peak and 80.8 on the same day at Cape d'Aguilar, and the lowest was 47.8 on the 3rd at the Peak, and 54.6 on the 2nd at Cape d'Aguilar.

The Mean Temperature in Hongkong decreased one degree Fahrenheit for every 501 feet ascended.

Table XIII exhibits the Relative Humidity as determined from observations of the Dry and Damp Bulb Thermometers. The Mean Relative Humidity at the Observatory was 86, at Cape d'Aguilar 95, at the Peak 96. These numbers are reduced to the mean of the 24 hours by aid of Table IV. The Least Relative Humidity registered was 60 at 1 p. on the 22nd at the Observatory: 68 at the same time at Cape d'Aguilar, and 66 at 10 a. on the same day at Victoria Peak.

Table XIV exhibits the Tension of Aqueous Vapour at the Observatory and at the Peak. The Mean Tension was 0.594 inches at the Observatory, and 0.546 inches at the Peak. These numbers are reduced to the mean of the 24 hours by aid of Table IV. The Greatest Tension registered was 0.832 at 10 a. on the 26th at the Observatory, and 0.772 at the same time at the Peak. The Least Tension was 0.296 at 10 p. on the 2nd at the Observatory, and 0.331 at the same time at the Peak.

Table XV exhibits the amount of Rain measured at 10 a. on the following day, and the duration of Precipitation at the Observatory. The greatest amount of Rain fell on the 11th, when it rained 1.220 inches at the Observatory, 1.17 at Stone Cutters' Island, and 1.52 at the Peak.

Thunder and Lightning occurred on the 4th, beginning early in the morning and ending after noon; on the 11th and 12th, beginning in the evening of the 11th and ending about noon next day; and on the 26th, beginning in the afternoon and ending next morning, after raging furiously the whole night.

Thunder was heard but no Lightning seen on the afternoons of the 12th and the 25th.

Lightning was seen but no Thunder heard on the 20th, beginning in the evening and ending early next morning; on the 21st, beginning in the afternoon and ending early next morning; on the 24th, beginning in the afternoon and ending early next morning; and on the 25th, beginning in the afternoon and ending early next morning.

Unusual Visibility was noticed on the 1st and the 15th.

Dew fell during the night between the 21st and the 22nd.

Fog occurred in the morning and in the evening of the 5th and in the morning of the 7th.

Fog prevailed extensively at Cape d'Aguilar and at Victoria Peak.

TABLE I.

BAROMETIC PRESSURE FOR THE MONTH OF APRIL, 1884.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means.
April 1, ...	29.801	29.797	29.787	29.803	29.812	29.838	29.858	29.896	29.922	29.935	29.951	29.939	29.919	29.911	29.907	29.904	29.911	29.925	29.960	29.977	29.992	30.019	30.021	30.028	29.909
„ 2, ...	30.024	30.020	30.013	30.007	30.010	30.016	30.030	30.034	30.037	30.040	30.026	30.027	.994	.958	.959	.945	.960	.957	.965	.985	30.005	30.009	29.966	29.998	30.000
„ 3, ...	29.961	29.953	29.936	29.929	29.913	29.942	29.982	29.968	29.975	29.962	29.932	29.923	.888	.879	.855	.840	.831	.858	.845	.851	29.885	29.883	.878	.861	29.907
„ 4, ...	.839	.815	.783	.798	.805	.808	.800	.815	.867	.839	.841	.807	.769	.743	.730	.737	.738	.753	.784	.802	.828	.842	.834	.832	.800
„ 5, ...	.814	.799	.779	.783	.793	.824	.838	.867	.874	.868	.846	.826	.798	.780	.761	.768	.773	.787	.801	.816	.826	.838	.832	.829	.814
„ 6, ...	.822	.808	.801	.807	.809	.824	.839	.860	.865	.871	.850	.831	.813	.793	.777	.766	.771	.787	.803	.818	.827	.835	.839	.837	.819
„ 7, ...	.824	.805	.793	.789	.796	.815	.833	.861	29.866	29.866	29.860	29.846	.833	.819	.799	.796	.806	.826	.852	29.878	29.899	29.929	29.942	29.946	.845
„ 8, ...	.935	.920	.910	.914	.927	.932	.956	.988	30.002	30.028	30.038	30.031	.999	.986	.965	.962	.961	.980	.988	30.004	30.012	30.018	30.010	30.002	.978
„ 9, ...	.991	.978	.958	.950	.950	.971	.981	.997	30.006	29.988	29.997	29.966	.946	.937	.928	.932	.924	.935	.933	29.951	29.968	29.973	29.954	29.939	.961
„ 10, ...	.920	.904	.889	.900	.905	.920	.924	.967	29.965	.939	.938	.921	.889	.888	.865	.854	.846	.855	.859	.869	.896	.895	.902	.906	.901
„ 11, ...	.895	.869	.864	.865	.871	.880	.904	.915	.920	.925	.917	.916	.885	.853	.849	.847	.813	.818	.865	.920	.943	.881	.855	.873	.881
„ 12, ...	.882	.849	.826	.826	.791	.823	.851	.853	.895	.940	.903	.909	.883	.881	.845	.791	.810	.813	.826	.852	.870	.889	.890	.889	.858
„ 13, ...	.877	.861	.848	.847	.861	.885	.897	.911	.923	.924	.910	.888	.868	.850	.834	.831	.827	.830	.823	.832	.847	.871	.866	.857	.865
„ 14, ...	.864	.851	.833	.838	.854	.869	.881	.905	.920	.923	.917	.904	.879	.867	.860	.853	.849	.859	.876	.897	.916	.925	.918	.912	.882
„ 15, ...	.901	.893	.881	.869	.878	.907	.927	.926	.918	.951 †	.943 †	.918 †	.903 †	.888 †	.873 †	.858 †	.868 †	.878 †	.893 †	.888 †	.903 †	.908 †	.908 †	.895	.900
„ 16, ...	.876	.868	.865	.871	.882	.913	.936	.948	.962	.954	.951	.936	.917	.900	.886	.873	.868	.880	.896	.918	.936	.943	.937	.926	.910
„ 17, ...	.908	.900	.888	.885	.893	.917	.922	.948	.958	.965	.945	.932	.919	.893	.880	.875	.875	.881	.892	.912	.921	.936	.931	.918	.912
„ 18, ...	.912	.898	.889	.888	.889	.897	.922	.948	.967	.957	.949	.943	.918	.895	.890	.889	.888	.892	.897	.906	.925	.939	.931	.923	.915
„ 19, ...	.904	.876	.857	.857	.867	.878	.891	.909	.926	.935	.919	.907	.872	.851	.847	.829	.823	.827	.839	.853	.863	.867	.851	.832	.870
„ 20, ...	.811	.806	.789	.787	.789	.793	.799	.809	.815	.815	.799	.794	.765	.746	.730	.712	.691	.708	.718	.741	.749	.759	.751	.721	.766
„ 21, ...	.706	.676	.654	.651	.661	.667	.681	.693	.696	.686	.700	.684	.660	.647	.631	.621	.637	.658	.677	.693	.718	.734	.748	.749	.680
„ 22, ...	.748	.745	.736	.745	.754	.778	.805	.824	.828	.840	.834	.816	.793	.787	.782	.776	.786	.804	.817	.842	.862	.879	.876	.871	.805
„ 23, ...	.849	.829	.817	.819	.830	.849	.876	.899	.910	.933	.935	.906	.880	.860	.859	.856	.846	.858	.864	.880	.896	.897	.896	.880	.872
„ 24, ...	.867	.850	.826	.834	.842	.856	.878	.896	.910	.911	.906	.894	.868	.852	.832	.821	.815	.822	.837	.851	.878	.884	.882	.875	.862
„ 25, ...	.869	.841	.826	.818	.818	.826	.838	.862	.862	.869	.858	.850	.830 †	.804 †	.782 †	.762 †	.777	.784	.800	.817	.827	.838	.842	.838	.827
„ 26, ...	.816	.808	.801	.804	.818	.824	.849	.851	.863	.877	.862	.840	.833	.824	.817	.814	.813	.828	.839	.862	.862	.885	.869	.864	.838
„ 27, ...	.852	.849	.839	.828	.842	.869	.896	.918	.928	.947	.953	.937	.931	.927	.911	.917	.955	.930	.941	.960	.974	.976	.971	.961	.917
„ 28, ...	.952	.927	.918	.918	.913	.924	.920	.945	.950	.946	.929	.925	.898	.878	.861	.860	.853	.867	.866	.881	.888	.898	.889	.880	.904
„ 29, ...	.864	.849	.811	.843	.831	.837	.841	.857	.874	.870	.866	.852	.837	.810	.794	.776	.771	.797	.803	.824	.834	.860	.848	.840	.834
„ 30, ...	29.814	29.801	29.789	29.788	29.788	29.800	29.814	29.823	29.843	29.855	29.844	29.830	29.810	29.794	29.774	29.764	29.773	29.785	29.794	29.810	29.819	29.832	29.831	29.834	29.809
.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hourly Means, ...	29.870	29.855	29.841	29.842	29.847	29.863	29.879	29.896	29.909	29.912	29.904	29.890	29.867	29.850	29.836	29.828	29.829	29.839	29.852	29.870	29.886	29.895	29.889	29.881	29.868

† Approximate Reading.

TEMPERATURE FOR THE MONTH OF APRIL, 1884.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means	Max.	Min.
April 1,.....	66.9	66.5	65.9	65.3	65.5	65.5	65.8	66.4	67.1	67.2	65.3	65.0	65.0	64.9	65.0	64.8	63.9	63.0	61.9	60.5	59.4	59.3	58.4	58.4	64.0	67.7	58.3
„ 2,.....	57.1	56.0	55.7	55.7	56.3	56.8	56.8	58.3	*59.4	60.5	*60.7	*61.0	61.2	*60.6	*59.9	59.3	*59.1	*58.9	*58.7	58.6	*57.9	57.2	56.8	57.0	58.3	61.2	54.7
„ 3,.....	57.7	57.9	57.9	57.0	57.4	56.6	56.6	57.0	57.9	59.4	59.2	58.6	58.6	58.0	58.8	59.4	59.6	59.9	59.7	59.8	59.8	59.6	59.5	59.3	58.5	60.0	56.4
„ 4,.....	59.3	59.1	59.3	59.7	59.9	60.0	60.4	60.7	60.0	61.0	61.0	62.7	63.1	63.2	63.6	63.2	62.7	62.9	63.0	62.7	62.8	62.5	62.6	62.5	61.6	64.3	59.1
„ 5,.....	62.6	62.6	62.7	62.7	63.3	63.2	63.6	64.1	65.1	66.6	66.6	67.5	67.6	66.6	66.7	65.7	65.5	65.3	65.1	65.2	65.4	65.1	65.4	65.7	65.0	68.0	62.5
„ 6,.....	66.1	66.6	66.7	66.9	67.2	68.0	69.1	70.3	71.4	73.3	76.5	77.5	76.6	75.7	75.2	75.0	74.6	74.2	74.1	73.3	72.7	72.9	72.7	73.2	72.1	77.8	65.6
„ 7,.....	71.7	71.5	70.7	69.9	69.6	69.7	70.1	70.2	71.6	70.9	72.8	73.5	75.0	75.7	78.1	80.4	78.1	74.5	72.9	71.9	68.9	66.9	66.4	65.1	71.9	80.5	65.1
„ 8,.....	64.9	64.0	64.2	62.7	62.9	62.3	62.1	62.3	62.7	63.1	62.7	60.9	63.3	61.1	61.0	60.5	59.3	58.7	59.5	58.7	58.9	58.9	59.0	59.3	61.4	65.1	58.4
„ 9,.....	59.7	59.4	59.9	59.5	59.3	59.1	59.0	59.7	59.9	60.5	62.1	63.4	63.9	62.7	62.7	62.0	61.2	61.0	61.3	61.7	61.7	61.9	61.8	61.3	61.0	64.1	58.9
„ 10,.....	61.4	61.0	61.0	61.4	61.5	61.4	61.7	62.3	62.7	64.2	64.5	65.0	65.2	64.6	64.2	64.3	64.4	63.9	64.0	64.3	64.6	64.9	65.0	65.1	63.4	65.5	61.0
„ 11,.....	65.0	65.3	65.2	65.5	65.7	65.9	66.3	66.8	67.7	68.7	70.0	70.6	71.0	72.9	72.5	71.1	69.3	67.7	67.7	68.2	67.2	67.5	68.1	68.2	68.1	73.2	65.0
„ 12,.....	68.3	68.3	68.6	68.2	68.3	67.8	66.8	67.1	67.8	65.4	66.1	66.7	65.6	65.9	67.8	68.5	68.4	68.2	67.0	67.3	66.7	65.6	66.3	66.6	67.2	68.6	65.2
„ 13,.....	66.7	66.6	65.4	65.2	64.6	64.4	65.0	66.1	67.1	68.9	70.8	71.0	72.8	73.5	70.9	72.2	70.6	67.7	67.5	67.2	67.2	67.1	66.6	66.3	68.0	74.7	64.4
„ 14,.....	66.7	66.3	66.2	65.9	65.0	64.6	64.8	64.3	64.5	65.9	67.2	67.1	67.6	67.0	66.2	65.0	65.2	64.8	64.6	64.5	64.1	63.6	63.6	63.6	65.3	67.8	63.6
„ 15,.....	63.7	63.8	63.9	64.0	64.0	64.6	65.4	67.4	70.0	70.8	71.4	73.0	73.9	74.2	74.5	74.0	71.9	69.0	68.2	67.4	67.4	67.4	67.0	66.7	68.5	74.9	63.7
„ 16,.....	66.4	66.8	66.7	66.5	66.6	66.5	66.8	68.3	69.3	70.1	70.7	70.8	72.6	72.6	73.3	73.8	71.7	69.2	68.0	67.6	67.2	67.3	67.0	66.7	68.9	74.0	66.4
„ 17,.....	66.6	66.5	65.6	65.5	65.4	65.5	66.2	67.8	69.2	70.3	71.5	73.3	73.7	74.7	73.1	74.0	70.7	69.9	68.4	68.1	67.5	67.5	67.9	67.9	69.0	75.2	65.4
„ 18,.....	67.4	66.9	66.9	67.2	67.2	66.7	67.5	67.8	68.8	69.9	70.9	71.2	70.6	70.0	68.0	66.4	66.1	66.2	65.9	65.9	66.1	66.1	66.2	66.0	67.6	71.5	65.9
„ 19,.....	66.2	66.1	66.4	66.3	66.4	66.4	67.2	68.1	69.2	68.4	67.5	66.9	70.8	71.3	71.2	69.1	68.5	67.8	67.4	67.7	67.7	68.0	67.3	66.9	67.9	71.5	65.9
„ 20,.....	66.9	66.9	66.8	66.9	67.2	66.9	67.2	67.9	68.1	68.6	70.0	68.2	70.9	69.6	68.5	68.1	67.4	67.1	67.1	67.3	67.3	67.8	67.8	67.5	67.8	72.2	66.7
„ 21,.....	67.3	66.9	67.2	66.9	67.5	67.6	67.9	68.4	70.7	74.0	69.8	71.8	73.9	74.7	78.6	79.2	75.7	75.1	72.7	71.8	69.8	70.9	69.9	69.6	71.2	80.5	66.8
„ 22,.....	69.0	68.1	67.8	66.9	67.6	67.5	68.5	71.3	73.2	75.3	78.1	80.9	82.1	81.3	79.8	79.0	80.0	76.9	74.7	72.7	71.8	71.4	70.8	70.7	73.5	82.1	66.7
„ 23,.....	70.2	69.8	69.4	68.8	68.7	68.3	70.9	72.1	72.4	73.4	73.3	74.0	74.7	75.7	76.4	74.7	72.8	71.3	70.5	69.9	69.7	69.1	69.1	69.2	71.4	76.9	67.9
„ 24,.....	69.1	68.8	68.7	68.7	68.7	68.5	68.9	69.7	71.3	72.9	73.3	74.7	76.3	77.3	77.5	73.9	71.6	70.6	70.2	70.1	70.6	70.5	70.9	70.5	71.4	77.7	68.4
„ 25,.....	70.6	70.6	70.9	70.6	70.8	71.0	71.9	72.9	*74.7	76.5	74.8	74.4	79.1	80.5	80.6	78.5	77.7	77.1	76.4	75.8	75.9	75.8	75.7	74.9	74.9	80.7	70.3
„ 26,.....	76.1	74.8	74.0	74.7	75.0	74.7	75.4	77.4	79.2	80.6	81.5	82.8	83.1	80.3	80.2	74.4	75.4	74.0	73.4	72.3	71.7	71.0	70.7	70.6	76.0	83.9	70.3
„ 27,.....	71.4	70.9	70.7	70.5	70.4	70.7	71.1	69.7	68.3	67.3	67.0	66.8	66.6	66.9	67.1	65.7	65.7	63.5	64.7	65.1	65.5	65.6	65.9	65.9	67.6	71.6	63.5
„ 28,.....	65.9	65.8	66.0	65.9	65.9	66.0	66.7	67.5	69.1	69.5	69.9	70.3	71.4	70.2	70.5	70.8	70.1	68.5	67.7	67.2	67.3	67.6	67.2	66.9	68.1	71.7	65.7
„ 29,.....	66.9	66.9	67.0	66.9	66.9	67.2	67.9	69.8	70.7	71.9	73.5	75.1	75.2	76.1	78.6	76.8	75.3	72.3	70.9	70.6	70.5	70.7	70.7	70.2	71.2	78.6	66.8
„ 30,.....	70.0	70.2	70.2	70.0	69.9	70.4	71.1	71.0	71.9	72.8	74.1	75.0	76.7	76.7	74.9	74.2	72.8	71.8	71.2	71.2	71.0	70.6	70.2	70.3	72.0	77.0	69.9
.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hourly Means,.....	66.3	66.0	65.9	65.7	65.8	65.8	66.3	67.1	68.0	68.9	69.4	70.0	70.9	70.8	70.9	70.1	69.3	68.0	67.5	67.2	66.8	66.7	66.5	66.4	67.8	72.6	64.3

* Interpolated.

TABLE III.

TEMPERATURE OF EVAPORATION AND RADIATION, FOR THE MONTH OF APRIL, 1884.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means.	Sun.	Rad.
April 1,	62.8	62.4	61.9	60.9	60.8	60.1	60.7	61.3	62.2	61.6	60.0	59.1	58.9	58.8	59.1	58.4	57.7	56.9	55.7	55.1	54.9	55.0	54.7	53.7	58.9	92.5	55.1
„ 2,	53.6	54.2	54.2	53.5	53.6	53.7	54.4	55.7	*55.8	56.0	*56.0	*56.0	56.0	*55.7	*55.4	55.1	*54.6	*54.1	*53.6	53.1	*52.1	51.1	51.7	52.6	54.2	131.8	53.5
„ 3,	52.8	53.1	52.5	52.9	53.5	53.8	54.0	54.7	54.9	55.5	56.5	56.0	56.4	56.6	57.1	57.8	57.7	58.3	58.0	58.3	58.3	58.5	58.7	58.6	56.0	93.2	52.4
„ 4,	58.7	58.6	58.7	59.2	59.3	59.6	59.9	60.1	58.7	60.3	60.6	61.8	62.3	61.9	62.3	62.3	61.7	61.9	62.0	62.0	62.2	61.9	62.3	62.3	60.9	90.3	58.1
„ 5,	62.3	62.3	62.1	62.3	62.7	62.7	63.0	63.3	64.1	65.2	65.2	65.9	65.7	65.4	65.5	64.9	*64.8	64.7	64.7	64.7	65.0	65.0	65.3	65.7	64.3	90.2	61.6
„ 6,	66.1	66.6	66.7	66.9	67.2	68.0	69.1	70.3	71.0	72.2	73.7	74.0	73.6	73.3	72.9	73.0	72.7	72.6	72.6	72.1	71.8	71.8	71.7	72.1	70.9	137.3	64.3
„ 7,	70.9	70.9	70.4	69.7	69.6	69.7	70.1	70.0	70.9	70.5	*71.2	*71.9	72.6	*73.3	*74.1	74.9	73.9	72.2	71.9	71.2	68.2	66.1	65.2	64.4	70.6	136.1	65.5
„ 8,	63.9	64.0	64.1	61.5	61.6	60.7	60.1	60.1	60.1	60.2	59.2	58.9	60.1	58.1	57.4	57.2	56.5	55.8	56.3	56.6	56.0	55.8	56.2	56.6	59.0	87.8	57.1
„ 9,	57.1	56.9	56.9	56.5	56.6	57.0	56.9	57.6	58.1	58.5	59.2	60.1	60.4	59.5	59.0	59.0	58.9	58.9	59.2	59.7	59.6	59.8	59.5	59.6	58.5	115.4	57.0
„ 10,	59.9	60.0	59.9	60.2	60.4	60.3	60.6	61.2	61.6	62.2	62.2	62.6	62.9	62.7	62.6	62.9	63.1	63.2	63.4	63.8	64.0	64.5	64.6	64.7	62.2	104.6	59.5
„ 11,	64.7	65.0	64.9	65.2	65.5	65.8	66.1	66.5	67.1	67.9	68.5	68.6	69.1	70.3	70.1	69.2	68.1	67.0	67.4	67.6	66.9	67.2	67.3	67.4	67.2	120.2	64.1
„ 12,	67.9	67.5	67.9	67.5	67.9	67.2	66.1	66.6	67.0	64.6	63.2	64.8	64.3	64.3	65.9	65.4	65.3	64.8	64.8	64.9	64.5	64.4	64.2	64.4	65.7	98.7	63.9
„ 13,	64.4	64.1	64.2	64.2	64.2	64.1	64.4	65.2	65.9	66.5	67.9	67.9	69.0	69.2	67.9	68.4	67.9	65.9	66.2	66.6	66.5	66.2	65.8	65.8	66.2	140.7	63.7
„ 14,	66.0	65.6	65.2	64.9	64.2	63.8	63.9	63.3	63.3	64.1	64.8	64.5	64.5	64.1	63.4	63.3	63.6	63.4	62.7	62.7	62.6	62.4	62.5	62.5	63.8	111.5	62.7
„ 15,	62.6	62.8	62.6	62.8	62.7	63.0	63.1	64.4	66.1	66.7	67.2	67.7	67.9	*67.9	*67.8	67.8	67.5	66.2	65.9	65.6	65.5	65.9	66.1	65.0	65.4	136.0	62.4
„ 16,	64.9	65.3	65.1	65.0	65.0	64.0	64.1	64.3	64.2	64.9	66.0	65.8	65.5	65.4	66.7	66.4	65.6	64.8	64.3	64.3	64.7	65.0	64.9	64.7	65.0	141.0	64.4
„ 17,	64.7	64.6	63.7	63.2	63.0	62.9	62.8	64.0	64.8	65.1	65.7	67.2	66.7	67.3	66.3	65.6	64.9	63.9	65.0	65.2	65.2	65.5	65.5	65.6	64.9	137.6	63.6
„ 18,	65.6	65.3	65.1	65.1	64.7	63.7	61.8	62.0	61.7	63.0	64.4	63.9	63.5	64.9	64.5	62.9	63.1	63.3	63.1	62.5	63.3	64.0	64.2	64.5	63.7	120.3	62.1
„ 19,	64.6	64.4	64.5	64.5	64.5	64.7	65.0	65.1	65.2	63.4	63.3	63.3	65.8	65.1	64.6	64.1	64.1	63.9	64.5	64.6	65.1	65.4	65.2	65.0	64.6	133.7	63.2
„ 20,	65.0	65.2	65.2	65.5	65.7	65.1	65.2	65.7	65.8	65.8	66.6	66.1	67.2	66.6	66.1	66.0	65.5	65.6	65.6	66.1	66.2	66.6	66.6	66.2	65.9	137.2	64.8
„ 21,	66.2	66.1	66.1	66.0	66.6	66.9	67.1	67.7	69.2	71.7	67.9	68.5	70.0	71.9	73.9	73.0	72.1	71.1	70.3	70.6	69.5	70.3	69.4	69.1	69.2	136.8	65.5
„ 22,	68.7	67.9	67.2	66.5	67.2	67.1	68.3	70.0	69.8	69.9	70.7	72.5	70.9	72.8	71.0	69.6	71.8	67.5	68.3	67.3	67.5	67.0	66.9	66.6	68.8	143.6	64.3
„ 23,	65.2	65.1	65.2	64.9	64.6	64.8	65.5	65.9	66.5	68.1	68.2	68.9	68.9	66.8	65.0	67.6	67.7	66.6	66.8	66.7	67.1	67.1	67.2	67.5	66.6	142.7	64.3
„ 24,	67.5	67.5	67.4	67.6	67.5	67.5	67.9	68.1	69.1	69.4	69.6	70.5	71.5	71.8	71.9	70.1	69.2	68.9	68.9	68.9	69.6	69.6	70.0	69.8	69.2	143.2	66.8
„ 25,	69.7	69.7	70.1	69.9	70.3	70.7	71.5	72.5	73.6	73.5	73.0	72.9	75.1	75.7	75.7	74.8	74.6	74.3	73.8	73.7	73.6	73.5	73.4	73.0	72.9	135.3	69.1
„ 26,	73.2	73.0	73.1	73.3	73.5	73.5	73.9	75.4	75.6	75.9	76.0	75.9	76.5	75.6	75.6	71.1	71.8	71.7	71.3	70.9	69.9	69.8	69.7	69.9	73.2	152.1	70.0
„ 27,	69.8	70.0	69.9	69.4	69.5	69.7	69.9	68.1	66.3	65.5	65.2	64.2	64.2	63.7	64.1	64.1	63.3	62.0	62.6	62.6	62.8	63.3	63.6	63.9	65.7	91.7	61.9
„ 28,	63.2	63.1	63.2	63.3	62.9	62.8	63.1	63.7	65.0	65.2	65.2	65.2	65.6	65.1	65.2	65.1	64.3	62.9	61.7	63.3	64.1	64.4	64.1	63.8	64.0	142.2	64.1
„ 29,	63.1	63.0	63.9	64.0	64.2	64.7	64.7	66.1	66.5	67.7	69.0	70.0	70.1	69.8	71.2	69.7	69.9	68.2	67.8	67.7	67.8	68.1	68.4	68.2	67.2	144.7	65.2
„ 30,	68.1	68.2	68.2	68.3	68.2	68.0	67.4	67.1	67.7	68.3	69.3	69.5	70.7	70.6	69.9	69.7	69.6	68.9	68.8	68.9	68.9	68.5	68.3	68.2	68.7	146.7	68.7
„	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hourly Means, ...	64.4	64.4	64.4	64.2	64.2	64.2	64.4	64.9	65.3	65.6	65.9	66.1	66.5	66.5	66.4	66.0	65.7	65.0	64.9	64.9	64.8	64.8	64.7	64.7	65.1	124.7	62.6

* Interpolated.

TABLE IV.

MEAN HOURLY AND DAILY RELATIVE HUMIDITY AND TENSION OF AQUEOUS VAPOUR FOR THE MONTH OF APRIL, 1884.

Hour.	Hourly Mean. Humidity.	Hourly Mean. Tension.	Date.	Daily Mean. Humidity.	Daily Mean. Tension.
			1884.		
1 a.	90	0.589	April 1,.....	75	0.432
2 „	92	0.593	„ 2,.....	76	0.366
3 „	92	0.594	„ 3,.....	85	0.417
4 „	92	0.590	„ 4,.....	96	0.528
5 „	92	0.589	„ 5,.....	96	0.594
6 „	92	0.589	„ 6,.....	94	0.741
7 „	90	0.589	„ 7,.....	94	0.735
8 „	88	0.595	„ 8,.....	85	0.469
9 „	86	0.598	„ 9,.....	85	0.459
10 „	83	0.596	„ 10,.....	93	0.545
11 „	82	0.600	„ 11,.....	95	0.656
Noon.	80	0.598	„ 12,.....	92	0.674
1 p	79	0.600	„ 13,.....	91	0.621
2 „	79	0.603	„ 14,.....	92	0.574
3 „	78	0.597	„ 15,.....	86	0.586
4 „	80	0.594	„ 16,.....	80	0.566
5 „	82	0.593	„ 17,.....	80	0.562
6 „	85	0.587	„ 18,.....	79	0.539
7 „	87	0.590	„ 19,.....	83	0.567
8 „	88	0.594	„ 20,.....	90	0.613
9 „	89	0.596	„ 21,.....	90	0.688
10 „	89	0.597	„ 22,.....	79	0.642
11 „	90	0.597	„ 23,.....	77	0.590
Midn.	91	0.598	„ 24,.....	89	0.685
			„ 25,.....	90	0.783
			„ 26,.....	87	0.781
			„ 27,.....	90	0.669
			„ 28,.....	80	0.543
			„ 29,.....	84	0.615
			„ 30,.....	84	0.659
			.....	...	...
Mean.	86	0.594	Mean.....	86	0.593

TABLE V.

DURATION OF SUNSHINE.

Date.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	Sums.
1884.														
April 1,.....	...	...	...	...	...	...	...	...	...	...	...	...	...	0.0
„ 2,.....	...	...	...	0.7	1.0	1.0	...	0.1	0.2	...	...	...	...	3.0
„ 3,.....	...	...	...	...	...	...	...	...	...	...	...	...	...	0.0
„ 4,.....	...	...	...	...	...	...	...	...	...	...	...	...	...	0.0
„ 5,.....	...	...	...	...	...	...	...	...	...	...	...	...	...	0.0
„ 6,.....	...	...	...	0.4	0.6	1.0	0.5	0.1	...	...	...	...	...	2.6
„ 7,.....	...	...	...	...	0.1	0.2	0.5	1.0	0.8	1.0	1.0	0.7	...	5.3
„ 8,.....	...	...	...	...	...	...	...	...	...	...	...	...	...	0.0
„ 9,.....	...	...	...	...	...	...	0.2	...	...	...	...	...	...	0.2
„ 10,.....	...	...	...	...	...	...	...	...	...	...	...	...	...	0.0
„ 11,.....	...	...	...	...	...	...	...	...	0.2	...	...	...	...	0.2
„ 12,.....	...	...	...	...	...	...	...	...	...	...	...	...	...	0.0
„ 13,.....	...	...	...	...	0.4	0.9	1.0	0.5	0.9	0.5	0.5	0.1	...	1.6
„ 14,.....	...	...	...	...	...	...	...	...	...	...	...	...	...	0.0
„ 15,.....	...	...	0.7	0.5	...	0.1	0.1	1.0	1.0	1.0	1.0	0.1	...	6.1
„ 16,.....	...	...	0.3	0.1	0.2	0.1	0.3	1.0	1.0	1.0	1.0	0.9	...	5.9
„ 17,.....	...	0.2	0.1	...	...	...	0.6	0.9	0.9	0.5	0.1	...	...	3.6
„ 18,.....	...	...	...	0.1	0.3	...	...	...	...	...	...	...	...	0.4
„ 19,.....	...	...	...	...	...	...	...	0.4	...	...	...	...	...	0.4
„ 20,.....	...	...	...	...	...	...	...	0.3	...	...	...	...	...	0.3
„ 21,.....	...	...	...	0.1	0.5	0.3	0.2	0.6	0.2	1.0	1.0	1.0	0.2	5.1
„ 22,.....	...	0.7	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.8	...	10.5
„ 23,.....	...	0.6	1.0	1.0	1.0	1.0	1.0	0.5	1.0	1.0	0.9	0.5	...	9.5
„ 24,.....	...	...	...	0.2	0.3	0.9	0.9	1.0	0.9	1.0	0.2	...	...	5.4
„ 25,.....	...	...	...	0.2	...	...	...	0.4	0.2	0.5	...	...	...	1.3
„ 26,.....	...	0.2	0.4	0.8	0.3	0.5	0.7	0.3	...	...	...	...	...	3.2
„ 27,.....	...	...	...	...	...	...	...	...	...	...	...	...	...	0.0
„ 28,.....	...	0.1	...	0.5	...	0.4	0.3	0.2	...	...	...	0.4	0.1	2.0
„ 29,.....	...	1.0	0.9	0.8	1.0	0.8	0.4	1.0	0.7	1.0	1.0	0.3	...	8.9
„ 30,.....	...	...	...	...	...	0.1	0.2	0.7	0.2	...	...	...	...	1.2
.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sums,.....	...	2.8	4.4	6.4	6.7	8.3	8.2	10.8	9.2	9.5	8.0	5.1	0.3	79.7
Hourly Mean,...	...	0.09	0.15	0.21	0.22	0.28	0.27	0.36	0.31	0.32	0.27	0.17	0.01	2.66

TABLE VI.

RAINFALL FOR THE MONTH OF APRIL, 1884.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Sums.
April 1,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
,, 2,	0·200	0·165	0·105	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·470
,, 3,	...	...	...	0·030	0·005	0·050	0·045	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·130
,, 4,	...	...	...	0·025	0·025	...	...	0·010	0·180	0·090	0·260	0·010	...	...	...	...	...	...	...	...	...	...	...	...	0·600
,, 5,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·015	0·005	0·020
,, 6,	...	...	...	...	...	0·010	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·010
,, 7,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·010	0·140	0·150
,, 8,	0·015	...	...	...	...	...	...	...	...	...	...	0·015	...	...	...	...	...	...	...	...	...	...	...	...	0·030
,, 9,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
,, 10,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
,, 11,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
,, 12,	...	...	...	...	...	...	0·095	0·050	1·055	0·070	0·075	...	0·015	0·015	0·010	...	...	...	...	...	...	...	...	...	1·385
,, 13,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
,, 14,	...	...	...	0·090	0·140	0·020	0·010	...	...	0·010	...	...	0·005	...	...	0·009	...	...	...	...	...	...	...	...	0·284
,, 15,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
,, 16,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
,, 17,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
,, 18,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·010	0·050	...	...	0·005	0·010	...	0·005	...	0·005	0·085
,, 19,	0·005	...	...	...	...	...	...	...	0·003	...	...	0·030	...	...	...	...	...	...	...	...	...	...	...	...	0·038
,, 20,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
,, 21,	0·020	0·010	0·023	0·005	0·065	0·005	0·010	0·100	...	...	0·490	...	...	...	...	...	...	...	...	...	...	...	...	...	0·730
,, 22,	...	...	0·005	...	...	0·005	...	0·007	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·017
,, 23,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
,, 24,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
,, 25,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
,, 26,	...	...	...	...	...	0·027	...	...	...	...	...	...	...	...	...	...	...	...	...	0·020	...	0·020	0·160	...	0·227
,, 27,	0·010	0·115	0·235	0·075	...	...	0·025	0·015	0·040	0·050	0·070	0·010	0·010	...	0·010	0·005	0·335	0·055	0·005	...	...	...	...	...	1·085
,, 28,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
,, 29,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
,, 30,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sums,	0·250	0·290	0·390	0·225	0·235	0·117	0·185	0·182	1·278	0·220	0·895	0·065	0·030	0·015	0·030	0·064	0·335	0·055	0·010	0·030	...	0·025	0·185	0·150	5·261

TABLE VII.

DIRECTION AND VELOCITY OF THE WIND, FOR THE MONTH OF APRIL, 1884.

DATE.	1 a.		2 a.		3 a.		4 a.		5 a.		6 a.		7 a.		8 a.		9 a.		10 a.		11 a.		Noon.		1 p.		2 p.		3 p.		4 p.		5 p.		6 p.		7 p.		8 p.		9 p.		10 p.		11 p.		Midt.		Sums.	Means.
	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.		
April 1	2	12	2	8	2	10	2	8	2	15	2	11	2	14	2	10	2	6	2	10	2	18	2	18	2	19	2	14	2	10	4	18	2	12	2	16	1	23	1	20	1	20	1	18	1	15	32	15	337	14.0
" 2	32	14	2	8	2	7	3	5	1	7	4	22	7	20	7	34	7	38	7	41	7	38	7	41	7	38	7	40	7	35	7	33	7	30	7	32	8	34	8	33	7	39	7	40	7	40	6	28	694	28.9
" 3	7	36	6	27	5	27	7	27	8	26	6	29	7	25	7	24	8	23	7	25	8	25	8	28	8	24	8	23	9	24	8	24	8	22	8	23	6	28	8	26	8	24	8	26	8	25	8	23	614	25.6
" 4	7	26	8	27	8	26	10	18	6	4	...	1	7	...	32	13	26	14	17	7	24	5	32	2	32	2	29	2	29	4	22	6	22	8	22	4	22	3	...	1	22	3	22	2	...	0	...	0	177	7.4
" 5	...	0	...	0	...	0	22	2	...	0	22	2	...	0	...	0	22	2	22	4	8	8	8	14	8	16	8	20	8	25	8	28	8	26	8	25	8	24	8	23	8	24	8	22	7	24	7	15	234	9.7
" 6	6	12	7	10	7	9	6	10	6	12	6	14	6	10	8	5	6	6	17	10	16	13	16	13	17	13	17	10	16	17	16	12	18	12	16	11	16	7	6	7	10	6	16	6	17	4	277	11.5
" 7	7	3	6	4	6	4	6	7	6	9	5	10	6	10	7	13	6	12	8	12	6	13	8	14	8	11	8	10	14	9	15	10	14	6	6	8	7	9	7	14	8	24	8	26	9	19	9	20	176	7.3
" 8	8	20	8	17	7	6	32	5	9	8	8	11	4	4	7	11	7	12	8	11	7	6	2	2	3	5	2	8	32	8	32	6	32	12	32	5	3	7	2	4	...	1	32	3	...	0	1	3	508	21.2
" 9	6	4	2	6	5	14	7	16	8	16	6	16	7	20	7	20	7	25	7	27	7	30	7	26	8	24	7	20	8	21	7	19	8	18	8	21	8	26	8	28	8	27	7	27	7	30	7	27	525	21.9
" 10	7	28	8	25	8	23	8	20	8	28	7	28	8	23	8	20	8	22	8	24	9	21	8	26	8	22	8	20	8	23	8	25	8	18	8	20	8	18	8	19	8	18	9	20	8	17	8	19	425	17.7
" 11	8	19	7	17	8	18	8	16	8	20	8	20	8	16	8	20	8	19	8	18	8	17	8	12	8	11	8	16	8	11	8	11	8	16	8	17	8	3	31	6	26	6	9	17	7	21	8	13	362	15.1
" 12	8	10	8	9	7	10	9	18	8	14	8	22	7	14	8	16	28	16	24	7	25	9	25	9	28	9	25	7	12	8	3	5	28	4	7	12	8	9	6	6	10	11	8	12	8	16	8	14	267	11.1
" 13	9	18	9	18	9	19	9	23	9	24	8	24	8	17	8	19	8	21	10	18	9	21	8	21	8	20	8	25	8	20	8	17	8	16	8	18	8	15	10	11	8	14	8	18	9	18	8	17	452	18.8
" 14	9	16	8	19	9	20	9	18	9	21	8	25	8	26	7	25	7	25	7	24	8	24	8	25	8	25	7	24	8	24	8	23	7	22	7	21	7	23	8	23	8	21	7	25	7	21	8	23	541	22.5
" 15	7	20	8	20	7	16	8	20	8	20	8	17	8	18	8	20	10	13	8	15	9	18	10	19	9	22	9	25	9	26	9	24	9	23	10	16	9	10	8	10	10	11	11	10	11	4	8	81	408	17.0
" 16	8	12	11	12	11	14	9	14	9	16	7	14	8	17	8	23	8	26	8	26	9	28	8	20	9	26	10	30	9	27	7	23	7	20	8	19	8	17	8	11	7	11	7	11	6	16	8	16	449	18.7
" 17	7	14	6	15	7	17	6	18	6	19	5	16	7	22	6	21	6	19	7	21	8	18	7	19	8	21	8	20	8	22	8	18	8	18	7	22	8	20	7	23	8	20	9	17	7	15	7	15	450	18.7
" 18	8	18	8	18	8	15	10	13	9	22	7	23	8	27	7	27	7	26	8	21	10	27	8	24	8	18	8	15	8	16	9	17	8	15	9	16	9	17	9	16	8	12	8	14	8	14	8	12	460	19.2
" 19	8	18	8	18	8	15	8	18	7	15	8	16	7	17	7	18	8	18	8	20	8	19	8	19	8	22	8	19	9	23	10	20	9	23	7	17	7	14	8	11	9	13	12	11	10	12	10	12	408	17.0
" 20	9	14	9	14	9	19	8	15	10	16	8	22	8	21	9	22	9	25	9	20	8	22	8	22	8	22	8	22	8	22	8	24	8	25	8	23	9	22	8	22	8	17	8	19	8	16	8	20	506	21.1
" 21	8	16	8	18	8	20	8	16	6	9	8	12	7	12	8	5	6	4	24	14	25	25	28	13	24	10	22	10	25	7	27	8	30	6	28	4	30	5	31	8	29	4	26	5	27	3	24	5	240	10.0
" 22	27	4	...	1	27	3	27	2	25	4	23	2	26	2	29	3	25	5	26	6	24	3	12	3	28	6	30	8	30	9	30	8	1	5	1	3	7	5	7	6	6	6	6	5	7	6	11	5	110	4.6
" 23	9	3	8	5	8	4	8	4	5	5	9	6	12	9	8	25	7	26	7	24	7	24	8	27	8	27	8	27	8	29	8	26	8	19	8	18	7	13	8	13	9	13	8	10	7	14	7	14	387	16.1
" 24	8	11	8	16	7	17	8	18	8	17	7	19	8	20	7	18	7	20	8	23	8	24	8	30	8	25	8	24	8	20	8	26	8	22	8	23	8	19	8	20	8	19	9	17	9	17	9	22	484	20.2
" 25	8	16	7	13	8	13	7	13	8	12	8	14	8	10	8	11	8	13	14	9	10	5	7	6	16	11	15	13	16	15	16	15	16	12	18	10	17	10	17	12	17	15	18	16	18	15	24	7	284	11.8
" 26	22	8	24	8	29	8	29	7	27	4	27	3	29	6	...	3	22	6	19	12	18	14	19	18	19	15	18	13	19	15	20	12	20	3	9	7	7	6	7	13	8	23	8	19	8	24	8	17	262	10.9
" 27	8	10	8	10	8	8	10	16	9	12	9	7	5	10	7	23	7	30	7	32	7	36	7	32	7	30	7	30	6	27	7	27	7	23	7	22	7	36	8	29	8	28	7	24	8	26	6	22	554	23.1
" 28	7	20	7	20	6	18	7	18	6	18	7	16	7	20	7	22	7	23	7	27	8	25	7	27	8	25	7	24	8	25	7	21	7	22	8	19	8	21	7	20	7	20	6	20	7	23	7	13	516	21.5
" 29	7	25	7	19	8	11	8	13	8	14	11	17	9	17	9	18	8	20	8	20	8	22	9	20	10	24	8	20	9	22	8	18	8	18	10	15	8	17	8	11	7	14	7	12	7	15	7	13	409	17.0
" 30	8	15	8	14	8	15	7	16	8	18	9	15	8	20	7	21	7	19	7	18	8	22	8	23	9	27	8	22	8	22	8	21	7	16	7	19	7	19	7	17	7	20	7	19	7	20	7	21	459	19.1
Sums	...	447	...	412	...	408	...	412	...	418	...	454	...	457	...	511	...	534	...	534	...	588	...	575	...	589	...	570	...	567	...	542	...	496	...	497	...	469	...	461	...	490	...	493	...	487	...	454	11,853	493.7
Hourly Means	...	14.9	...	13.7	...	13.6	...	13.7	...	13.9	...	15.1	...	15.0	...	17.0	...	17.8	...	17.8	...	19.6	...	19.2	...	19.4	...	19.0	...	18.9	...	18.1	...	16.5	...	16.6	...	15.6	...	15.4	...	16.3	...	16.4	...	16.2	...	15.1	395.1	16.5

TABLE XI.

VICTORIA PEAK.

Date.	Barometer.			Temperature.						
	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.	Sun.	Max.	Min.	Rad.
1884.										
April 1,.....	...	...	...	58.0	56.0	54.4	80.6	58.0	52.0	52.7
„ 2,.....	...	...	...	54.4	50.6	49.8	112.0	54.9	48.1	48.5
„ 3,.....	...	...	...	54.8	55.2	62.6	88.0	62.7	47.8	47.9
„ 4,.....	...	...	...	57.8	61.8	60.8	95.2	63.7	53.8	53.7
„ 5,.....	...	...	...	64.8	66.8	69.8	100.0	69.9	60.0	60.5
„ 6,.....	...	...	...	69.8	69.8	70.8	110.0	71.9	68.0	68.5
„ 7,.....	...	...	...	68.8	68.8	67.8	127.0	70.9	67.8	66.5
„ 8,.....	...	...	...	54.8	54.8	51.8	101.0	67.9	51.0	50.7
„ 9,.....	...	...	...	53.6	53.6	53.4	97.0	55.8	51.4	51.3
„ 10,.....	...	...	...	60.0	63.6	63.0	101.0	64.9	57.2	54.5
„ 11,.....	...	...	...	65.4	65.6	63.8	122.0	66.6	61.0	60.5
„ 12,.....	...	...	...	60.8	63.6	63.0	82.0	66.9	57.2	56.7
„ 13,.....	...	...	...	65.2	65.6	63.8	130.0	66.9	52.0	53.5
„ 14,.....	...	...	...	59.8	59.0	58.0	96.0	64.9	51.4	52.5
„ 15,.....	...	...	...	62.6	64.6	60.2	130.0	68.3	56.2	57.5
„ 16,.....	...	...	...	61.0	61.6	60.8	122.2	64.1	59.0	58.9
„ 17,.....	...	...	...	59.8	62.8	61.8	127.0	64.1	58.0	58.5
„ 18,.....	...	...	...	59.8	59.4	60.4	109.0	62.3	58.0	56.7
„ 19,.....	28.167	28.098	28.100	59.8	62.8	61.8	127.2	62.9	59.0	59.3
„ 20,.....	28.043	27.995	28.034	63.8	65.0	65.2	112.8	66.1	61.0	59.3
„ 21,.....	27.936	27.918	28.012	68.8	70.6	68.8	127.2	70.7	64.0	59.7
„ 22,.....	28.098	28.060	28.068	71.2	73.8	73.8	136.2	75.9	67.2	62.5
„ 23,.....	28.157	28.105	28.151	67.4	63.8	63.8	130.8	69.9	62.0	60.3
„ 24,.....	28.152	28.085	28.110	65.8	67.0	66.8	114.0	68.1	63.0	62.3
„ 25,.....	28.142	28.061	28.072	69.8	70.2	69.8	97.0	70.9	64.0	64.5
„ 26,.....	28.133	28.104	28.160	71.6	68.2	69.2	126.8	71.9	63.0	66.5
„ 27,.....	28.166	28.133	28.157	62.6	60.0	58.2	76.0	65.9	57.0	56.5
„ 28,.....	28.191	28.119	28.128	60.8	61.0	57.8	106.0	61.1	52.0	52.5
„ 29,.....	28.115	28.073	28.103	65.0	65.2	64.8	136.2	69.7	58.0	59.5
„ 30,.....	28.105	28.052	28.077	64.8	65.8	65.4	118.0	66.3	63.8	64.3
.....	...	...	...	...	...	...	...	...	...	...
Mean,.....	...	...	...	62.6	63.2	62.7	111.3	66.0	58.1	57.9

TABLE XII.

TEMPERATURE.

Date.	Cape d'Aguilar.					
	4 a.	10 a.	4 p.	10 p.	Max.	Min.
	°	°	°	°	°	°
1884.						
April 1,.....	63.9	65.1	62.6	57.9	65.1	57.9
„ 2,.....	55.1	59.4	58.6	57.6	59.8	54.6
„ 3,.....	58.6	56.9	57.2	59.6	60.3	56.8
„ 4,.....	59.1	61.0	62.6	62.1	62.8	58.6
„ 5,.....	62.6	61.0	64.6	64.6	64.8	62.6
„ 6,.....	65.6	71.6	74.8	70.6	76.8	64.6
„ 7,.....	69.3	70.1	74.8	64.6	74.8	64.6
„ 8,.....	61.1	59.6	58.3	56.6	64.8	56.6
„ 9,.....	59.6	58.8	60.6	61.1	62.0	57.6
„ 10,.....	60.6	61.6	62.6	63.6	63.8	60.6
„ 11,.....	64.8	65.6	67.3	65.8	68.6	63.6
„ 12,.....	64.8	63.6	67.1	64.6	67.0	63.6
„ 13,.....	64.1	64.6	67.6	64.6	67.8	63.4
„ 14,.....	62.6	62.1	62.1	62.3	65.8	62.1
„ 15,.....	63.6	66.6	67.6	65.4	69.8	62.4
„ 16,.....	65.6	65.6	66.6	64.6	68.5	64.6
„ 17,.....	64.3	66.1	67.9	65.6	68.8	63.6
„ 18,.....	65.9	66.1	64.6	64.6	67.3	64.6
„ 19,.....	64.6	65.6	65.4	66.4	67.2	64.6
„ 20,.....	65.6	66.6	65.2	65.6	67.0	65.2
„ 21,.....	65.6	71.6	73.8	71.1	76.1	65.6
„ 22,.....	69.6	77.8	79.6	71.6	80.8	67.6
„ 23,.....	69.1	72.0	68.6	67.6	73.8	67.6
„ 24,.....	67.8	68.6	68.4	67.6	69.8	67.6
„ 25,.....	69.1	72.1	74.5	72.1	76.0	68.6
„ 26,.....	74.6	78.6	71.6	69.6	80.8	68.6
„ 27,.....	68.6	64.6	64.6	64.6	69.0	61.8
„ 28,.....	65.1	66.9	67.4	66.6	69.8	65.1
„ 29,.....	66.6	68.6	69.6	69.4	71.0	66.6
„ 30,.....	69.1	69.6	69.6	69.4	70.8	69.1
.....	...	...	...	...	...	...
Mean, ...	64.9	66.4	66.9	65.3	69.1	63.3

TABLE XIII.

RELATIVE HUMIDITY.

Date.	Observatory.			Cape d'Aguilar.				Victoria Peak.		
	10 a.	4 p.	10 p.	4 a.	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.
1884.										
1,	72	65	74	85	85	83	88	91	81	84
2,	74	75	63	94	79	80	79	94	94	93
3,	76	91	94	85	91	99	97	99	99	99
4,	96	94	97	100	95	100	99	99	89	99
5,	92	96	99	100	100	100	100	99	99	99
6,	95	90	95	100	100	96	100	99	99	99
7,	98	76	96	92	99	91	100	99	99	99
8,	83	80	82	94	91	98	98	99	96	99
9,	88	83	89	94	94	91	97	99	99	99
10,	89	92	97	99	97	99	100	99	99	99
11,	96	90	98	100	100	99	100	99	99	99
12,	96	85	94	100	100	89	99	99	84	87
13,	87	82	95	99	100	97	100	93	96	94
14,	90	91	93	100	99	100	99	99	99	99
15,	80	71	92	97	90	87	92	94	84	92
16,	74	65	88	97	92	90	99	92	83	94
17,	74	61	89	95	89	83	96	99	69	94
18,	66	81	89	89	91	100	99	88	89	90
19,	74	75	87	97	92	94	92	93	88	89
20,	86	90	94	97	92	99	99	99	99	99
21,	89	74	97	100	100	91	93	99	74	85
22,	75	60	78	93	83	68	78	66	86	86
23,	75	68	90	85	90	90	97	73	79	99
24,	83	82	95	97	95	92	100	99	84	98
25,	86	83	89	99	99	98	96	99	99	99
26,	79	85	91	98	93	100	100	99	99	99
27,	90	92	88	100	100	100	100	99	99	99
28,	78	73	83	95	84	82	92	96	94	88
29,	80	69	88	92	78	87	87	93	93	99
30,	78	79	90	95	90	97	95	97	99	97
.....	...	...	...	...	...	...	...	...	...	...
Mean,	83	80	89	96	93	93	96	95	92	95

TABLE XIV.

TENSION OF AQUEOUS VAPOUR EXPRESSED IN INCHES OF MERCURY.

Date.	Observatory.			Victoria Peak.		
	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.
1884.						
1,	0.476	0.405	0.377	0.440	0.365	0.357
2,	0.390	0.380	0.296	0.357	0.346	0.331
3,	0.391	0.459	0.478	0.384	0.435	0.566
4,	0.515	0.551	0.548	0.478	0.488	0.532
5,	0.604	0.606	0.618	0.612	0.655	0.726
6,	0.777	0.786	0.767	0.726	0.726	0.751
7,	0.742	0.792	0.632	0.702	0.703	0.678
8,	0.484	0.426	0.406	0.428	0.411	0.383
9,	0.466	0.461	0.488	0.410	0.410	0.408
10,	0.535	0.556	0.602	0.516	0.587	0.574
11,	0.674	0.689	0.664	0.625	0.629	0.591
12,	0.600	0.586	0.589	0.531	0.498	0.504
13,	0.619	0.645	0.633	0.580	0.608	0.558
14,	0.576	0.560	0.549	0.513	0.498	0.481
15,	0.602	0.598	0.619	0.534	0.510	0.483
16,	0.547	0.550	0.588	0.499	0.460	0.501
17,	0.551	0.519	0.603	0.513	0.397	0.519
18,	0.485	0.528	0.570	0.458	0.457	0.475
19,	0.518	0.533	0.593	0.483	0.506	0.488
20,	0.599	0.613	0.638	0.591	0.616	0.620
21,	0.748	0.729	0.735	0.702	0.552	0.595
22,	0.659	0.598	0.604	0.504	0.714	0.714
23,	0.618	0.582	0.638	0.486	0.469	0.591
24,	0.673	0.686	0.712	0.633	0.563	0.648
25,	0.787	0.813	0.796	0.726	0.737	0.726
26,	0.832	0.719	0.713	0.772	0.687	0.712
27,	0.606	0.579	0.553	0.566	0.517	0.485
28,	0.566	0.555	0.563	0.512	0.504	0.419
29,	0.623	0.632	0.654	0.575	0.580	0.612
30,	0.633	0.667	0.670	0.598	0.633	0.611
.....	...	...	...	...	...	...
Mean,	0.597	0.593	0.597	0.548	0.542	0.555

TABLE XV.

RAINFALL AT DIFFERENT STATIONS.

Date.	Observatory.		Stone Cutters' Island.	Victoria Peak.
	Amount.	Duration.	Amount.	Amount.
1884.	ins.	hrs.	ins.	ins.
April 1,.....	0.470	3	0.40	0.24
" 2, ...	0.130	2	0.22	0.12
" 3,.....	0.330	3	0.48	0.28
" 4,.....	0.270	3	0.05	0.40
" 5,.....	0.030	6	...	...
" 6,.....	...	0	...	...
" 7,.....	0.165	3	0.23	0.22
" 8,.....	0.015	2	...	0.15
" 9,.....	...	0	...	...
" 10,.....	...	0	...	...
" 11,.....	1.220	6	1.47	0.32
" 12,.....	0.165	5	0.20	0.26
" 13,.....	0.270	3	0.21	0.52
" 14,.....	0.014	3	...	0.10
" 15,.....	...	0	...	...
" 16,.....	...	0	...	...
" 17,.....	...	0	...	...
" 18,.....	0.093	7	0.10	0.15
" 19,.....	0.030	0¼	...	...
" 20,.....	0.240	7	0.17	0.72
" 21,.....	0.507	1	...	0.30
" 22,.....	...	0	...	...
" 23,.....	...	0	...	...
" 24,.....	...	0	0.41	...
" 25,.....	0.027	1	...	...
" 26,.....	0.775	10	0.99	0.90
" 27,.....	0.510	7	0.34	0.54
" 28,.....	...	0	...	...
" 29,.....	...	0	...	...
" 30,.....	0.074	2	0.13	0.12
"	...	...	...	...
Total,.....	5.335	74	5.40	6.34

Hongkong Observatory, 24th May. 1884.

W. Doberck.
Government Astronomer.

HONGKONG OBSERVATORY.

Weather Report for May, 1884.

In the *China Coast Meteorological Register*, based on information transmitted by the Great Northern and the Eastern Extension Telegraph Companies—which I have published daily, is given a summary of the atmospheric circumstances in Manila and along the Coast of China as far north as Shanghai. It also contains information concerning the weather prevailing in Nagasaki and Wladiwostock.

At the beginning of the month the Barometer was falling, but began to rise on the 1th. Light Easterly winds and foggy weather prevailed over the Sea, while the Temperature and Humidity were slowly increasing. On the 5th however a fresh NE. Monsoon was reported between Swatow and Formosa. From the 9th to the 10th the Barometer continued to rise with decreasing Temperature and Humidity and the Easterly Winds increased in force. On the 16th the Barometer began to fall with rising Temperature and Humidity, and a fresh NE. Monsoon was felt out at sea. On the 18th a strong Revolving Gale passed across Wladiwostock, where the Barometer fell to 28.80 at 5 p. It travelled from W. to E. and was felt as a Strong Breeze in Shanghai. On the 23rd the Barometer began to rise and on the 24th strong NE. squalls were met at sea. The Barometer continued to fall with rising Temperature and Humidity and moderate winds from the 26th to the 29th. It then began to rise and the NE. Wind freshened.

The Barograph and the Standard Barometer at the Observatory are placed 110 feet above Mean Sea Level. The bulbs of the Thermograph Thermometers are 111 feet above Mean Sea Level and 6 feet above the ground. They are exposed in an unpainted and double-louvered zinc screen fixed to the north wall of the main building in a shaded position. The Solar Radiation Maximum Thermometer is 109 feet above Mean Sea Level and 4 feet above the ground, and the Terrestrial Radiation Minimum Thermometer is about one inch above the ground. They are placed over dry earth, as the ground round the Observatory has not yet been turfed. The self-recording Rain-gauge is placed 106 feet above Mean Sea Level, and the rim, which is 11¼ inches in diameter, is 24 inches above the ground. The cups of the Anemograph are 45 feet above the ground, and 150 feet above Mean Sea Level.

At Victoria Peak the Instruments, except the Radiation Thermometers, are placed in the Look-out. The Barometer is about 1823 feet above Sea Level. The bulbs of the Thermometers are about 4 feet above the floor, except the Maximum Thermometer, which is a few inches higher. The Radiation Thermometers, are placed at the same height above the ground as at the Observatory. At Cape d'Aguilar the Thermometers are placed about 170 feet above Sea Level (according to the *Government Gazette*) in a wooden screen 2 feet above the ground, except the Maximum Thermometer, which is a few inches higher.

Table I exhibits the hourly readings of the height of the Barometer reduced to 32.0 Fahrenheit, but not to Sea Level, as measured (at two minutes to the hour named) from the Barograms. The Mean Height of the Barometer was 29.752, the Highest was 29.898 at 10 p. on the 5th, and the Lowest was 29.539 at 4 a. and 5 a. on the 29th. The Barometric Tide amounted to 0.079.

Table II exhibits the hourly readings of the Temperature (Dry Bulb Thermometer) as measured from the Thermograms (at two minutes past the hour named), and also the Extreme Temperatures during the day. The Mean Temperature was 74.8 the Highest was 87.5 at about 3 p. on the 17th and the Lowest was 64.1 at about 4 a on the 13th and 14th.

Table III exhibits the hourly readings of the Temperature of Evaporation (Damp Bulb Thermometer) as measured from the Thermograms (at two minutes past the hour named) and also the Solar Radiation Maximum (Black Bulb) and Terrestrial Radiation Minimum Temperatures.

Table IV exhibits the Mean Relative Humidity in percentage of saturation (the humidity of air saturated with moisture being 100) and the Mean Tension of Aqueous Vapour present in the air expressed in inches of mercury, for every hour in the day and for every day in the month. The Mean Tension, which did not vary much during the 24 hours, being however somewhat greater during the hottest than during coldest part of the day, was 0.736. The Mean Relative Humidity, which exhibits a great daily variation, was 85.

Table V exhibits the Duration of Sun-shine as registered by aid of the Sun-shine Recorder from half an hour before to half an hour after the hour named. The Sun shone 99.1 hours during the month.

Table VI exhibits the amount of Rain registered from half an hour before to half an hour after the hour named. The Total Rain-fall during the month was 9.039 inches. The greatest Hourly Rain-fall was 1.135 at noon on the 1st.

Table VII exhibits, for every hour in the day, the Velocity of the Wind and its Direction in numbers (8=E, 16=S, 24=W, 32=N) as measured from the Anemograms. The Velocity is the number of miles traversed by the Wind from half an hour before to half an hour after the hour named. The Direction is read off at the hour, except when the Wind is very light and changeable, when the average Direction during the hour is estimated; taking into account the Velocity from different quarters. The Direction is not noted when the Velocity is below 1.5 miles an hour.

The Mean Velocity was 12.9 miles an hour. It was greatest during the middle of the day. The Velocity did not exceed 30 miles an hour on any day.

The Total Distance travelled by, as well as the Duration and average Velocity of Winds from different quarters were as follows :—

Direction.	*Total Distance.*	*Duration.*	*Velocity.*
	Miles.	Hours.	Miles per hour.
N	315	46	6.8
NE	430	48	9.0
E	7,135	448	15.9
SE	339	37	9.2
S	410	41	10.0
SW	659	54	12.2
W	159	19	8.4
NW	159	24	6.6
Calm	20	27	0.7

Table VIII exhibits, for every hour in the day, the Velocity of the Wind reduced to 1 and also to 2 Directions, as well as the Mean Direction of the Wind. The Diurnal Variation of the latter was very small.

Table IX exhibits the Direction (to two points) and Force of the Wind (0-12) at Victoria Peak. The Average Force of the Wind was 3.9 corresponding to a Velocity of 22 miles per hour. The Sea Disturbance (0-9) exhibited in the same table has been derived from observations made at Cape d'Aguilar.

Table X exhibits the Amount (0-10), Name and Direction, whence coming, of the Clouds. Where the names of Upper and Lower Clouds are given, but only one Direction, this refers to the Lower Clouds. The prevailing Direction of the Wind at the Observatory, as shewn in Table VIII, was E.

he Peak, as shewn in Table IX, SE by E; the Lower Clouds came partly from about E and partly about SW. Their average Direction was S and the Direction veered with increasing height, the highest clouds coming from W. On an average 80 per cent of the sky was clouded.

Table XI and Table XII exhibit the readings of the Barometer and the Thermometers at Victoria and at Cape d'Aguilar.

The Mean Temperature was 68.5 at the Peak and 72.9 at Cape d'Aguilar, the Highest was 76.9 the 22nd at the Peak and 86.3 on the 17th at Cape d'Aguilar, and the lowest was 57.2 on the 14th the Peak, and 62.8 on the 13th at Cape d'Aguilar.

The Mean Temperature in Hongkong decreased one degree Fahrenheit for every 376 feet ascended.

Table XIII exhibits the Relative Humidity as determined from observations of the Dry and Damp b Thermometers. The Mean Relative Humidity at the Observatory was 85, at Cape d'Aguilar at the Peak 95. These numbers are reduced to the mean of the 24 hours by aid of Table IV. e Least Relative Humidity registered was 56 at 4 p. on the 31st at the Observatory; 73 at the same e at Cape d'Aguilar, and 66 at 10 a. and 10 p. on the same day at Victoria Peak.

Table XIV exhibits the Tension of Aqueous Vapour at the Observatory and at the Peak. The an Tension was 0.736 inches at the Observatory, and 0.661 inches at the Peak. These numbers reduced to the mean of the 24 hours by aid of Table IV. The Greatest Tension registered was 31 at 10 p. on the 22nd at the Observatory, and 0.866 at the same time at the Peak. The Least sion was 0.444 at 4 p. on the 13th at the Observatory, and 0.440 at the same time at the Peak.

Table XV exhibits the amount of Rain measured at 10 a. on the following day, and the duration Precipitation at the Observatory. The greatest amount of Rain fell on the 1st, when it rained 75 inches at the Observatory, 1.53 at Stone Cutters' Island, and 3.20 at the Peak.

Heavy thunderstorms passed over the Observatory at noon and at 5 p. on the 1st. Thunder and ghtning were registered during the previous night and up to the evening on the 1st.

Thunder and Lightning were registered in the evening on the 3rd.

On the 9th Thunder was heard at 4 p. and a heavy Thunderstorm passed over the Observatory 7 p.

Thunder and Lightning continued during the following night and at 6½ p. on the 10th a heavy nderstorm passed over the Observatory.

Lightning was registered during the following night and at 3 p. on the 11th a heavy Thunderm again passed over the Observatory.

At 5½ p. on the 18th a Thunderstorm passed.

Lightning was seen in the evening on the 22nd and Thunder and vivid Lightning were registered ring the following night.

Lightning was seen in the evening on the 27th and during the following night.

Unusual Visibility was noticed on the 2nd, the 4th, the 5th, the 17th and on the 23rd.

Dew fell during the evening on the 2nd, the 7th, the 8th and on the 11th, and during the nights tween the 20th and the 21st, and between the 25th and the 26th.

Lunar Halos were seen on the 2nd and on the 11th, and Lunar Coronas on the 7th, the 8th, and e 31st.

Fog was not seen at the Observatory.

TABLE I.

BAROMETRIC PRESSURE FOR THE MONTH OF MAY, 1884.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means.
May 1, ...	29.817	29.801	29.795	29.786	29.795	29.813	29.826	29.847	29.865	29.861	29.861	29.856	29.838	29.813	29.794	29.804	29.808	29.821	29.801	29.814	29.830	29.841	29.843	29.827	29.823
„ 2, ...	.825	.806	.785	.790	.791	.817	.828	.844	.858	.874	.857	.848	.818	.792	.770	.766	.764	.783	.789	.806	.820	.834	.834	.822	.813
„ 3, ...	.804	.792	.778	.782	.781	.791	.815	.834	.837	.836	.819	.804	.769	.752	.730	.730	.738	.768	.779	.821	.817	.822	.805	.808	.792
„ 4, ...	.783	.759	.735	.770	.770	.780	.813	.826	.837	.849	.838	.834	.818	.807	.791	.789	.787	.798	.810	.830	.844	.864	.858	.853	.810
„ 5, ...	.834	.822	.815	.814	.812	.827	.850	.874	.874	.884	.874	.870	.850	.834	.825	.814	.820	.838	.855	.878	.888	.898	.895	.868	.851
„ 6, ...	.838	.816	.806	.806	.812	.831	.854	.871	.875	.882	.862	.855	.827	.814	.783	.772	.769	.772	.792	.802	.820	.845	.830	.792	.822
„ 7, ...	.782	.770	.751	.743	.740	.742	.768	.780	.776	.766	.764	.746	.711	.692	.678	.655	.656	.656	.663	.684	.694	.705	.699	.678	.721
„ 8, ...	.660	.646	.646	.641	.641	.648	.662	.691	.698	.696	.685	.670	.650	.635	.627	.615	.603	.608	.617	.643	.655	.674	.679	.669	.652
„ 9, ...	.664	.657	.648	.656	.662	.666	.685	.711	.715	.721	.726	.712	.699	.692	.678	.664	.658	.672	.686	.686	.710	.722	.724	.721	.689
„ 10, ...	.702	.693	.678	.672	.675	.687	.710	.734	.755	.760	.759	.745	.724	.706	.689	.673	.682	.712	.743	.782	.784	.779	.769	.770	.724
„ 11, ...	.737	.734	.719	.732	.734	.726	.752	.774	.779	.785	.790	.773	.752	.739	.738	.713	.698	.707	.744	.767	.775	.786	.786	.778	.751
„ 12, ...	.739	.762	.764	.758	.760	.783	.805	.827	.825	.816	.816	.814	.789	.778	.767	.760	.759	.773	.785	.807	.824	.840	.835	.814	.792
„ 13, ...	.797	.779	.778	.776	.780	.782	.792	.826	.832	.840	.862	.851	.828	.812	.798	.781	.782	.794	.802	.818	.836	.845	.844	.835	.811
„ 14, ...	.830	.813	.803	.803	.808	.824	.842	.859	.870	.874	.873	.862	.848	.824	.812	.797	.796	.807	.812	.827	.839	.854	.850	.846	.832
„ 15, ...	.825	.826	.823	.830	.834	.848	.861	.881	.886	.889	.880	.875	.849	.836	.822	.814	.804	.812	.817	.834	.839	.851	.846	.838	.843
„ 16, ...	.826	.824	.818	.820	.824	.836	.842	.851	.858	.866	.857	.842	.816	.796	.791	.776	.774	.774	.769	.781	.790	.800	.803	.801	.814
„ 17, ...	.786	.789	.776	.781	.784	.794	.808	.816	.827	.828	.810	.786	.772	.753	.744	.730	.730	.742	.742	.758	.763	.784	.793	.794	.779
„ 18, ...	.780	.762	.753	.745	.750	.767	.778	.798	.802	.806	.798	.787	.762	.738	.726	.725	.734	.766	.770	.777	.788	.817	.820	.820	.774
„ 19, ...	.811	.803	.793	.802	.808	.823	.838	.864	.865	.863	.868	.858	.844	.832	.814	.792	.782	.784	.805	.822	.831	.840	.832	.811	.824
„ 20, ...	.789	.786	.772	.777	.790	.801	.812	.822	.829	.831	.829	.806	.789	.784	.761	.742	.735	.734	.743	.757	.758	.761	.750	.738	.779
„ 21, ...	.723	.723	.716	.714	.714	.727	.736	.755	.767	.763	.731	.719	.702	.684	.663	.639	.633	.639	.647	.663	.669	.683	.675	.673	.698
„ 22, ...	.663	.653	.640	.641	.643	.656	.673	.688	.692	.692	.681	.656	.629	.615 †	.577	.578	.582	.587	.599	.612	.633	.641	.638	.610	.637
„ 23, ...	.609	.608	.593	.589	.591	.602	.635	.664	.678	.695	.704	.700	.685	.684	.669	.672	.680	.691	.701	.729	.744	.759	.761	.752	.675
„ 24, ...	.739	.738	.730	.737	.749	.754	.769	.775	.777	.801	.794	.782	.768	.767	.756	.751	.758	.773	.787	.802	.810	.824	.810	.788	.772
„ 25, ...	.779	.773	.752	.750	.754	.776	.791	.810	.824	.831	.840	.838	.810	.806	.785	.871	.765	.774	.789	.815	.821	.836	.837	.824	.802
„ 26, ...	.810	.793	.791	.788	.793	.806	.822	.822	.831	.839	.826	.815	.798	.784	.776	.754	.751	.764	.779	.798	.806	.803	.799	.781	.797
„ 27, ...	.774	.768	.761	.757	.756	.758	.767	.778	.778	.780	.765	.752	.729	.718	.689	.681	.682	.690	.697	.714	.710	.710	.712	.697	.734
„ 28, ...	.674	.658	.651	.652	.650	.650	.667	.660	.659	.670	.664	.650	.620	.598	.583	.567	.562	.571	.572	.584	.601	.611	.598	.589	.623
„ 29, ...	.568	.563	.548	.539	.539	.551	.568	.579	.581	.587	.592	.585	.570	.553	.550	.549	.545	.555	.572	.590	.622	.640	.642	.619	.575
„ 30, ...	.600	.603	.591	.591	.604	.617	.617	.629	.629	.623	.632	.624	.605	.603	.600	.594	.594	.615	.635	.672	.692	.685	.667	.653	.624
„ 31, ...	.655	.653	.646	.649	.655	.668	.666	.675 †	.678	.689	.676	.671	.667	.662	.650	.643	.648	.662	.680	.703	.708	.711	.704	.691	.671
Hourly Means ...	29.749	29.741	29.731	29.732	29.735	29.747	29.763	29.780	29.796	29.791	29.785	29.774	29.753	29.739	29.724	29.717	29.712	29.724	29.735	29.754	29.765	29.776	29.772	29.760	29.752

† Approximate Reading.

TABLE II.

TEMPERATURE FOR THE MONTH OF MAY, 1884.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means	Max.	Min.
May 1,	70.4	70.3	70.3	70.2	70.1	70.0	70.2	70.8	70.9	70.7	70.7	69.8	71.2	72.7	72.1	71.5	68.6	68.9	68.8	68.9	69.1	69.5	68.9	69.1	70.2	73.2	68.2
„ 2,	69.1	69.5	69.7	70.2	70.5	70.8	70.9	71.8	74.6	75.8	76.7	78.9	80.9	82.3	82.2	81.2	78.9	76.0	74.3	74.0	73.8	73.1	73.3	73.3	74.7	83.0	69.0
„ 3,	72.8	72.5	72.6	71.8	71.7	72.2	74.6	76.2	77.3	79.4	79.0	79.3	82.3	83.8	84.2	79.9	77.9	75.1	74.0	70.6	71.9	71.8	71.9	72.0	75.6	84.3	70.2
„ 4,	72.1	71.8	71.2	71.2	70.9	71.2	72.9	74.9	76.0	77.1	77.7	78.2	78.5	79.1	78.0	76.8	77.4	75.0	73.7	73.0	72.3	72.1	72.0	72.0	74.4	80.4	70.9
„ 5,	72.0	72.0	71.8	71.3	71.1	71.2	71.9	73.0	74.2	74.9	78.1	78.7	78.5	79.4	80.2	79.1	77.0	74.7	73.9	73.9	73.9	73.6	73.2	72.7	74.6	80.4	70.9
„ 6,	72.1	72.1	71.9	71.7	71.5	71.5	71.8	72.0	71.8	71.8	71.5	71.6	71.9	72.9	72.6	72.1	71.6	70.9	70.8	70.9	71.1	71.5	71.2	71.2	71.7	73.0	70.8
„ 7,	71.0	70.9	70.9	71.2	71.2	71.1	72.6	74.0	75.0	76.8	77.7	77.2	78.1	76.5	75.2	75.7	74.7	74.1	73.3	72.9	72.6	72.3	72.2	72.3	73.7	79.2	70.8
„ 8,	72.9	72.8	73.2	73.0	72.8	73.0	75.0	76.9	77.3	77.3	78.1	82.2	81.3	79.6	81.3	82.0	81.1	79.2	77.2	76.6	75.7	75.3	75.1	74.8	76.8	84.2	72.3
„ 9,	75.3	75.3	74.9	74.7	74.7	74.8	76.4	77.1	79.0	81.0	82.5	82.1	82.8	81.5	80.9	79.9	79.0	77.0	74.5	73.5	72.8	73.4	73.7	74.2	77.1	83.3	72.8
„ 10,	74.8	74.7	74.7	75.5	76.8	77.1	78.1	78.1	78.5	78.3	78.6	81.3	83.8	82.8	83.2	80.0	79.0	74.0	71.9	71.1	70.9	71.1	71.2	71.5	76.5	84.1	70.7
„ 11,	71.6	71.6	71.6	71.6	71.8	72.1	73.0	74.5	76.4	78.1	79.9	79.4	79.8	76.8	72.2	72.0	71.2	71.2	71.7	71.8	71.7	71.5	71.3	71.2	73.5	79.9	71.1
„ 12,	71.1	71.8	72.0	71.8	71.9	71.5	71.9	72.8	75.8	76.4	75.7	73.7	73.0	72.7	71.9	70.7	70.5	68.4	67.5	67.4	66.8	66.2	66.3	65.9	71.0	76.9	65.8
„ 13,	65.7	65.0	64.4	64.8	65.0	64.4	64.8	64.8	66.3	66.5	65.6	69.5	70.9	68.6	68.0	68.8	68.8	68.4	68.4	68.2	68.3	68.2	66.8	65.7	66.9	71.5	64.1
„ 14,	65.4	64.6	64.6	64.4	64.7	65.7	66.6	66.1	65.8	67.1	68.0	68.8	68.7	71.2	72.1	72.5	72.8	70.5	69.8	69.8	70.0	70.1	70.1	70.1	68.3	73.6	64.1
„ 15,	69.8	69.9	69.9	69.6	69.3	69.4	69.9	70.8	71.3	72.6	73.8	74.7	76.7	77.2	78.1	77.2	75.5	73.6	71.7	71.2	71.2	71.3	71.5	71.6	72.4	79.0	69.2
„ 16,	71.5	71.6	71.3	70.3	70.7	71.2	71.9	74.0	74.9	74.8	75.9	78.5	79.1	80.9	80.3	75.8	73.6	72.9	72.9	73.2	73.7	73.7	73.8	73.9	74.2	81.4	70.2
„ 17,	74.0	73.9	73.8	73.8	73.6	73.7	75.1	77.6	77.8	80.3	80.8	84.4	85.1	86.4	87.3	85.3	84.1	81.7	79.3	77.9	77.6	77.3	77.3	77.0	79.0	87.5	73.5
„ 18,	76.7	77.4	78.1	78.0	78.1	78.3	77.4	78.4	79.1	80.9	82.5	84.3	85.2	84.2	85.3	82.4	79.7	76.4	74.7	75.2	73.5	72.8	71.8	71.7	78.4	85.8	71.7
„ 19,	72.7	72.0	71.2	70.7	70.9	71.1	72.4	73.8	74.8	74.8	75.5	74.8	72.9	70.9	70.6	71.9	71.5	71.0	70.7	70.6	70.6	70.2	70.2	69.9	71.9	75.8	69.9
„ 20,	70.2	70.1	70.3	70.4	70.2	70.4	70.9	71.8	73.3	73.8	74.2	75.9	77.2	76.1	76.8	76.8	76.0	74.0	72.7	72.3	72.6	72.7	72.7	72.9	73.1	77.8	69.9
„ 21,	72.9	72.9	73.0	73.1	73.2	73.9	75.3	76.7	79.1	81.3	82.2	83.0	83.9	83.2	82.9	81.9	81.5	81.4	80.4	79.9	79.7	79.5	79.5	79.6	78.7	84.4	72.9
„ 22,	79.4	79.2	79.3	78.8	79.0	79.3	80.0	80.1	80.9	82.4	83.6	85.4	85.9	86.0	87.0	86.9	86.3	83.3	82.1	81.5	81.0	80.5	80.4	80.6	82.0	87.1	78.6
„ 23,	80.4	80.3	79.8	80.1	79.2	79.4	78.6	78.5	78.7	79.4	80.5	81.4	81.1	80.2	79.3	77.3	77.1	75.9	75.8	75.5	73.7	73.2	72.3	71.7	77.9	82.1	71.7
„ 24,	72.2	72.1	72.0	72.0	72.0	71.5	72.2	73.7	74.8	75.5	74.5	76.0	76.3	75.2	75.0	74.4	73.5	72.8	71.3	71.2	70.9	71.0	71.0	71.2	73.0	76.6	70.9
„ 25,	71.4	71.6	71.8	71.8	71.9	72.1	72.7	72.2	72.8	71.7	72.7	72.7	78.1	77.3	77.5	78.5	76.7	74.9	74.0	73.8	72.8	72.8	72.9	73.0	73.6	80.3	71.1
„ 26,	73.0	72.8	72.6	72.6	73.0	73.2	73.7	76.3	77.1	78.7	81.9	81.5	80.7	77.9	77.3	79.4	79.0	77.4	75.5	75.2	74.8	74.8	74.6	74.8	76.2	83.4	72.4
„ 27,	75.0	75.0	74.9	74.7	74.7	74.9	75.7	76.0	76.8	77.1	78.3	79.6	80.1	82.2	81.6	81.8	78.9	77.4	76.6	76.3	75.9	75.8	75.8	76.0	77.1	83.3	74.6
„ 28,	76.0	76.1	76.7	76.4	76.7	75.8	73.8	74.8	76.5	78.1	79.2	78.9	77.3	78.7	79.7	77.9	76.3	76.0	75.9	75.8	75.9	75.7	75.7	75.5	76.6	80.1	73.3
„ 29,	75.6	75.0	75.0	74.9	74.9	75.0	76.3	77.2	75.7	76.2	77.8	79.1	78.0	76.9	75.9	74.6	74.9	73.4	73.3	73.0	72.2	72.3	72.2	71.9	75.0	79.2	71.9
„ 30,	72.3	72.8	72.7	72.8	73.0	73.5	74.1	75.4	78.0	80.7	80.1	80.9	82.6	82.4	80.8	79.9	78.1	76.7	76.0	75.7	75.0	74.7	74.8	74.8	76.6	83.1	71.9
„ 31,	74.8	74.6	74.7	74.2	74.6	74.7	76.9	79.0	80.9	82.5	85.1	84.1	82.2	81.2	83.1	82.2	81.2	78.6	76.5	75.7	75.0	74.8	74.3	73.9	78.1	86.1	73.9
Hourly Means,	72.7	72.7	72.6	72.5	72.6	72.7	73.5	74.5	75.5	76.5	77.4	78.3	78.8	78.6	78.5	77.6	76.5	74.9	73.8	73.4	73.1	73.0	72.8	72.8	74.8	80.6	70.9

TABLE III.

TEMPERATURE OF EVAPORATION AND RADIATION, FOR THE MONTH OF MAY, 1884.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means.	Sun.	Rad.
May 1,	68.4	68.6	68.7	68.7	68.9	68.9	69.1	69.6	69.7	69.4	69.3	68.8	69.3	71.0	70.0	69.7	67.4	68.1	67.8	67.7	67.7	67.7	67.8	67.8	68.8	112.6	67.0
„ 2,	68.1	69.1	69.4	69.8	70.1	70.5	70.7	71.2	72.9	73.6	74.1	75.5	75.9	76.9	76.4	75.9	74.7	73.3	72.8	72.8	72.6	72.3	72.4	72.3	72.8	144.3	67.0
„ 3,	71.8	71.5	71.6	71.2	71.2	71.8	73.2	73.9	74.4	75.6	75.5	75.9	77.5	77.6	77.3	75.7	74.9	73.4	72.9	69.0	70.8	70.6	70.5	70.9	73.3	146.2	70.2
„ 4,	70.9	70.9	69.8	69.6	69.7	69.9	70.9	71.4	72.4	73.2	73.9	74.0	74.1	74.2	73.1	72.9	73.3	71.9	71.2	70.7	70.3	70.4	70.2	70.1	71.6	151.7	68.7
„ 5,	70.0	69.7	69.7	69.6	69.4	69.5	69.8	70.1	70.9	70.8	72.2	72.9	72.3	*73.1	*73.8	72.6	72.4	71.5	71.2	71.5	71.3	71.3	71.3	70.9	71.2	155.3	69.5
„ 6,	70.6	70.3	70.0	69.5	69.3	69.2	69.5	69.6	69.2	69.1	68.8	69.0	69.5	70.0	69.8	69.6	69.2	69.0	69.2	69.5	69.9	70.1	70.1	70.2	69.6	102.4	68.5
„ 7,	70.2	70.1	70.2	70.3	70.4	70.3	71.3	72.2	72.6	73.7	74.1	73.7	74.0	73.0	72.5	72.8	72.1	71.7	71.2	71.1	71.0	71.3	71.4	71.6	71.8	137.7	69.6
„ 8,	71.9	71.9	72.2	71.9	71.9	72.0	73.5	74.4	73.8	73.6	74.2	76.2	75.2	75.2	75.1	76.0	75.8	75.2	74.7	74.5	73.8	73.8	73.6	73.5	73.9	152.4	70.4
„ 9,	73.9	73.9	73.8	73.8	73.8	74.0	75.0	75.4	76.2	77.0	76.9	76.8	77.1	76.7	77.0	76.1	76.0	74.8	72.8	72.4	71.4	71.8	72.1	72.5	74.6	128.8	72.2
„ 10,	73.1	72.8	73.0	74.4	75.5	75.6	75.9	75.6	76.0	76.0	76.1	77.1	78.3	77.8	77.9	77.0	77.1	71.5	71.6	70.8	70.2	70.2	70.1	70.5	74.3	145.8	70.8
„ 11,	70.6	70.7	70.7	70.8	71.0	71.1	71.7	71.9	73.4	74.2	74.8	74.6	74.8	73.9	71.9	71.4	70.5	70.3	69.8	70.7	70.6	70.5	70.3	70.5	71.7	119.7	70.1
„ 12,	70.3	70.5	70.7	69.1	69.1	68.6	69.4	69.3	71.2	71.5	70.7	69.9	69.6	70.2	69.5	68.7	68.7	66.8	65.8	65.7	64.2	63.7	63.3	62.8	68.3	129.7	65.6
„ 13,	63.1	62.3	61.6	61.8	61.8	60.8	60.8	60.7	61.6	60.9	60.9	63.7	62.8	61.4	61.9	61.3	61.4	61.7	62.0	63.2	63.6	62.6	59.9	59.1	61.7	126.7	62.5
„ 14,	58.9	60.7	60.7	60.3	61.4	61.6	61.9	62.2	62.5	64.1	64.6	64.7	64.4	65.7	66.1	66.1	63.0	65.8	65.1	65.1	65.2	65.2	65.5	65.2	63.8	112.5	61.8
„ 15,	65.1	64.9	65.0	65.2	64.9	64.4	64.7	65.1	65.1	66.0	67.5	67.7	68.3	68.8	67.6	68.4	67.9	67.4	67.5	67.9	68.1	68.5	68.6	69.0	66.8	143.8	67.8
„ 16,	68.9	69.2	68.8	68.8	68.9	69.1	69.6	69.7	70.5	70.7	71.4	73.1	73.4	74.1	73.9	72.2	71.9	71.6	71.6	71.9	72.4	72.5	72.7	72.7	71.2	150.5	68.4
„ 17,	72.9	73.0	73.0	73.0	72.8	73.0	74.1	75.7	75.4	76.8	77.0	77.1	78.3	77.8	78.4	77.4	77.4	76.7	76.0	76.1	75.8	75.6	75.2	74.9	75.6	150.4	72.4
„ 18,	75.0	74.9	75.1	75.2	75.3	75.6	76.0	76.8	77.0	77.5	77.2	77.7	77.5	76.9	77.4	76.8	76.8	76.1	73.8	74.6	70.9	69.4	67.8	66.3	74.9	154.0	72.9
„ 19,	68.9	67.4	65.9	65.3	65.2	64.5	66.6	67.7	68.3	69.0	69.9	70.1	69.2	69.4	69.4	70.0	69.2	68.7	68.9	68.7	68.9	69.0	69.0	69.0	68.3	104.3	68.6
„ 20,	68.9	69.0	69.1	69.1	69.3	69.5	69.6	69.9	71.1	71.1	71.2	72.4	73.0	72.4	72.9	72.4	72.4	71.3	71.1	71.2	71.5	71.6	71.8	72.0	71.0	148.8	68.5
„ 21,	72.0	72.1	72.3	72.4	72.5	72.9	73.9	74.8	76.4	76.9	77.4	77.8	77.9	77.7	77.7	77.7	77.5	77.7	77.2	76.8	77.0	77.1	76.9	76.7	75.8	149.2	71.3
„ 22,	76.7	76.6	76.6	76.4	76.4	76.7	77.4	77.2	77.7	78.4	78.7	79.4	79.9	78.8	79.9	79.0	79.7	78.3	78.2	77.7	77.8	78.1	77.9	77.7	78.0	154.9	76.2
„ 23,	77.8	77.7	77.7	77.5	77.5	77.5	77.0	77.7	74.7	74.7	76.0	76.1	76.4	75.8	75.0	73.3	73.1	72.6	72.0	71.3	71.3	70.8	70.2	70.4	74.8	139.1	70.9
„ 24,	70.0	69.5	68.0	68.3	68.3	67.9	68.0	67.7	68.1	68.6	67.4	68.5	68.4	68.6	68.3	67.2	66.2	66.4	65.8	66.0	65.7	65.5	65.0	65.1	67.4	127.7	66.5
„ 25,	65.1	63.9	65.9	66.6	65.1	65.7	66.6	67.2	67.8	69.4	69.4	69.4	72.2	71.7	71.7	72.2	71.6	70.7	69.9	69.9	69.9	70.3	70.7	71.0	68.9	150.4	69.4
„ 26,	70.9	70.5	70.3	70.2	70.6	71.0	71.2	72.7	73.3	74.1	75.7	75.9	75.2	73.8	73.7	74.9	74.9	73.8	73.3	73.3	73.3	73.2	73.3	73.4	73.0	152.3	70.8
„ 27,	73.4	73.7	73.6	73.5	73.5	73.7	74.3	74.5	74.8	75.3	76.6	76.5	77.0	77.9	77.6	77.1	76.0	75.6	75.0	75.0	74.8	74.7	74.7	74.8	75.1	129.2	73.0
„ 28,	75.0	75.2	75.5	75.6	75.7	75.1	75.5	77.6	75.9	76.3	76.6	74.6	75.6	75.0	75.6	74.7	74.1	73.9	73.8	74.4	74.6	74.4	74.6	74.5	74.9	132.7	73.0
„ 29,	74.4	74.1	74.1	74.1	74.0	74.4	75.1	75.0	75.3	73.7	74.4	75.3	74.2	73.8	72.9	72.8	72.3	71.8	71.8	71.8	71.5	71.4	71.1	71.0	73.3	144.4	70.9
„ 30,	71.2	71.6	71.5	71.2	71.1	71.7	72.0	72.7	73.0	73.1	72.6	73.4	71.8	71.3	70.0	72.1	71.5	72.1	71.0	71.6	70.2	70.0	70.1	71.1	71.6	146.0	71.0
„ 31,	71.1	71.1	69.8	69.6	68.9	69.3	71.2	69.0	70.8	71.8	73.8	74.8	73.3	69.1	70.7	71.3	71.6	70.9	70.5	70.8	70.7	71.2	70.4	70.7	70.9	146.8	71.4
Hourly Means,	70.6	70.6	70.5	70.4	70.4	70.5	71.1	71.5	71.9	72.5	72.9	73.3	73.4	73.2	73.1	72.8	72.4	71.6	71.1	71.1	70.9	70.8	70.6	70.6	71.6	138.8	69.6

* Interpolated.

TABLE IV.

MEAN HOURLY AND DAILY RELATIVE HUMIDITY AND TENSION OF AQUEOUS VAPOUR FOR THE MONTH OF MAY, 1884.

Hour.	Hourly Mean.		Date.	Daily Mean.	
	Humidity.	Tension.		Humidity.	Tension.
			1884.		
1 a.	90	0.726	May 1,.....	92	0.686
2 „	90	0.726	„ 2,.....	90	0.774
3 „	90	0.724	„ 3,.....	89	0.791
4 „	90	0.721	„ 4,.....	87	0.739
5 „	89	0.719	„ 5,.....	84	0.719
6 „	89	0.722	„ 6,.....	90	0.697
7 „	88	0.735	„ 7,.....	89	0.755
8 „	86	0.737	„ 8,.....	86	0.799
9 „	84	0.739	„ 9,.....	89	0.824
10 „	82	0.749	„ 10,.....	90	0.820
11 „	80	0.754	„ 11,.....	91	0.754
Noon.	78	0.758	„ 12,.....	87	0.657
1 p.	76	0.754	„ 13,.....	73	0.482
2 „	76	0.750	„ 14,.....	77	0.535
3 „	76	0.747	„ 15,.....	73	0.584
4 „	79	0.748	„ 16,.....	86	0.723
5 „	82	0.746	„ 17,.....	85	0.841
6 „	85	0.736	„ 18,.....	84	0.819
7 „	87	0.731	„ 19,.....	83	0.645
8 „	89	0.737	„ 20,.....	90	0.732
9 „	89	0.731	„ 21,.....	87	0.853
10 „	89	0.729	„ 22,.....	83	0.906
11 „	89	0.724	„ 23,.....	86	0.822
Mid.	89	0.724	„ 24,.....	74	0.598
			„ 25,.....	78	0.645
			„ 26,.....	85	0.770
			„ 27,.....	91	0.846
			„ 28,.....	92	0.843
			„ 29,.....	92	0.798
			„ 30,.....	77	0.709
			„ 31,.....	69	0.660
Mean, ...	85	0.736	Mean,.....	85	0.736

TABLE V.

DURATION OF SUNSHINE.

Date.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	Sums.
1884.														
1,.....	...	...	...	...	...	...	...	...	0.2	...	...	...	...	0.2
2,.....	...	...	...	0.1	0.7	0.9	1.0	1.0	1.0	1.0	0.9	0.3	...	6.9
3,.....	...	0.8	0.8	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.4	...	...	9.0
4,.....	...	0.1	0.7	0.6	0.3	1.0	0.7	0.5	1.0	0.7	0.7	0.9	...	7.2
5,.....	...	...	0.2	0.1	0.6	1.0	0.9	0.4	0.9	1.0	1.0	0.2	...	6.3
6,.....	...	...	...	...	...	...	...	...	...	...	...	...	...	0.0
7,.....	...	...	...	0.5	0.1	0.6	0.1	0.4	0.2	0.2	...	...	...	2.1
8,.....	...	1.0	1.0	1.0	1.0	1.0	1.0	0.6	0.2	0.3	0.1	0.1	...	7.3
9,.....	...	0.4	0.1	0.1	0.1	...	...	...	...	...	...	...	...	0.7
10,.....	...	...	...	...	...	...	0.3	0.6	0.5	0.3	...	...	...	1.7
11,.....	...	...	...	...	...	...	...	...	...	...	...	...	...	0.0
12,.....	...	...	...	0.2	0.3	...	...	...	...	...	...	...	...	0.5
13,.....	...	...	...	...	...	...	0.1	...	...	...	...	...	...	0.1
14,.....	...	...	...	...	...	...	...	...	...	...	0.5	0.6	...	1.1
15,.....	...	0.1	0.1	0.1	0.7	0.8	1.0	1.0	1.0	1.0	1.0	1.0	0.1	8.2
16,.....	...	0.1	0.7	0.1	...	0.2	0.6	0.5	0.9	0.6	...	...	...	3.7
17,.....	...	...	1.0	...	0.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.2	8.3
18,.....	...	...	...	...	0.1	0.1	0.5	0.7	0.8	0.2	...	...	...	2.4
19,.....	...	...	...	...	...	...	...	...	...	...	...	...	...	0.0
20,.....	...	...	...	...	...	...	0.7	0.2	...	0.9	0.8	0.7	...	3.3
21,.....	...	...	0.1	0.6	1.0	1.0	0.9	0.9	0.5	0.1	...	0.3	0.2	5.6
22,.....	...	...	0.1	0.8	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.2	9.1
23,.....	...	...	...	...	...	...	...	0.2	...	...	...	...	...	0.2
24,.....	...	...	...	0.2	...	...	...	...	...	...	...	...	...	0.2
25,.....	...	...	...	...	...	...	...	0.3	0.1	0.1	...	...	...	0.5
26,.....	...	...	...	...	0.9	0.6	1.0	0.3	...	...	0.1	0.6	...	3.8
27,.....	...	...	...	...	...	...	...	...	0.5	0.3	...	...	...	0.8
28,.....	...	...	...	...	...	...	...	...	...	...	...	...	...	0.0
29,.....	...	...	...	...	...	0.1	0.1	...	...	...	...	...	...	0.2
30,.....	...	...	...	0.1	0.1	...	...	0.2	...	...	...	...	...	0.4
31,.....	...	0.6	0.4	0.2	1.0	1.0	0.8	1.0	0.9	1.0	1.0	1.0	0.1	9.0
Sums,.....	...	3.1	5.2	5.7	9.3	11.3	12.7	11.8	11.7	10.7	8.8	7.7	1.1	99.1
Means, .	...	0.10	0.17	0.18	0.30	0.36	0.41	0.38	0.38	0.35	0.28	0.25	0.04	3.20

TABLE VI.

RAINFALL FOR THE MONTH OF MAY, 1884.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Sums.
May 1,	...	...	...	...	0·010	0·045	0·005	...	...	0·014	0·800	1·135	...	...	...	0·410	0·115	0·115	...	...	...	...	...	...	2·649
„ 2,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 3,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·135	...	...	...	...	0·135
„ 4,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 5,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·020	0·015	0·035
„ 6,	0·015	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·005	...	...	...	0·010	0·125	0·010	0·165
„ 7,	0·015	0·035	...	0·010	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·060
„ 8,	...	...	...	...	...	...	...	...	...	0·010	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·010
„ 9,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·005	0·045	0·050	0·430	0·005	...	...	...	...	0·535
„ 10,	...	...	0·005	0·020	...	...	0·005	...	...	...	...	...	...	...	...	0·040	0·005	0·845	0·190	0·120	0·085	...	...	...	1·315
„ 11,	...	...	...	...	...	...	...	...	...	...	...	...	0·035	0·205	0·770	0·060	0·090	0·010	...	...	...	...	...	...	1·170
„ 12,	...	...	0·010	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·065	0·025	0·010	...	...	...	0·015	0·125
„ 13,	...	0·005	...	...	...	0·005	...	...	0·010	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·020
„ 14,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 15,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 16,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·010	0·005	...	...	...	...	...	...	0·015
„ 17,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 18,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·410	0·170	0·070	0·010	...	...	...	...	0·660
„ 19,	...	...	...	...	...	...	...	...	...	...	...	...	...	0·135	0·040	...	...	...	...	...	...	...	...	...	0·175
„ 20,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 21,	...	...	...	...	...	0·010	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·010
„ 22,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 23,	...	...	...	...	0·085	...	...	0·050	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·005	0·140
„ 24,	0·005	...	...	0·005	...	...	0·005	...	0·005	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·020
„ 25,	...	...	...	...	...	...	...	0·005	0·005	0·030	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·040
„ 26,	...	...	...	...	...	...	...	...	...	0·005	...	...	...	...	...	0·005	...	...	...	...	...	...	...	...	0·010
„ 27,	...	...	...	...	...	...	...	0·005	...	0·025	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·030
„ 28,	...	...	...	0·100	0·140	0·430	0·780	0·020	...	...	...	0·080	0·010	...	...	...	...	...	...	...	...	...	...	...	1·560
„ 29,	...	0·030	0·005	...	...	0·015	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·095	...	...	...	0·145
„ 30,	...	0·005	0·005	...	0·005	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·015
„ 31,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sums,	0·035	0·075	0·025	0·135	0·240	0·505	0·795	0·080	0·020	0·084	0·800	1·215	0·045	0·340	0·810	0·520	0·675	1·265	0·715	0·280	0·180	0·010	0·145	0·045	9·039

TABLE VII.

DIRECTION AND VELOCITY OF THE WIND, FOR THE MONTH OF MAY, 1884.

DATE.	1 a.		2 a.		3 a.		4 a.		5 a.		6 a.		7 a.		8 a.		9 a.		10 a.		11 a.		Noon.		1 p.		2 p.		3 p.		4 p.		5 p.		6 p.		7 p.		8 p.		9 p.		10 p.		11 p.		Midt.		Sums.	Means.
	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.		
May 1	7	20	7	20	8	21	8	21	8	21	8	14	8	18	8	16	8	20	7	19	8	14	12	14	9	10	8	22	9	18	18	10	26	4	7	11	9	19	8	6	7	4	10	16	9	10	9	16	872	15.5
" 2	8	12	8	16	8	17	8	16	8	15	8	14	8	16	8	13	10	11	10	12	10	9	9	15	9	15	9	17	8	23	8	16	8	17	8	17	8	13	8	7	8	9	8	10	8	8	8	5	318	13.2
" 3	8	7	8	3	8	9	9	15	8	13	9	11	10	9	10	6	10	10	9	14	9	23	9	18	8	22	8	19	8	16	8	13	8	4	22	8	26	18	28	14	16	9	7	6	6	4	1	6	273	11.4
" 4	...	...	8	8	8	24	8	28	9	...	0	29	2	3	6	8	14	9	15	9	23	9	23	8	27	8	26	8	23	8	18	8	22	9	20	7	16	7	16	7	17	7	15	7	15	7	13	323	13.5
" 5	6	15	7	12	7	13	8	19	6	16	7	15	7	18	7	22	8	21	8	24	8	28	8	24	9	26	9	35	9	27	10	27	11	20	9	19	9	17	9	12	7	13	8	12	7	16	7	16	460	18.7
" 6	7	21	7	21	7	22	7	24	7	26	7	21	7	20	7	20	8	28	8	20	7	27	7	27	7	26	7	24	7	21	8	20	8	22	8	19	7	19	8	24	8	24	6	17	7	16	6	15	518	21.6
" 7	9	14	7	14	7	11	8	10	8	9	8	10	8	6	8	11	8	12	8	12	8	16	8	16	8	22	8	20	8	16	8	17	8	18	8	17	8	12	7	12	8	12	7	8	7	7	7	7	317	13.2
" 8	7	3	7	4	7	4	...	0	7	2	7	3	...	1	7	2	29	5	29	8	26	8	20	5	20	10	16	8	24	6	20	5	16	7	16	7	...	1	...	1	10	2	...	0	...	1	13	3	96	4.0
" 9	7	5	7	5	7	5	7	6	7	10	7	7	7	8	7	9	5	16	9	16	10	18	6	17	9	16	9	16	9	13	1	14	3	15	3	25	10	5	6	7	8	7	8	7	7	7	8	151	6.3
" 10	7	7	8	11	9	6	11	6	10	11	16	10	16	12	17	10	16	7	15	9	17	4	19	8	17	8	15	12	16	9	15	10	17	9	26	19	18	4	16	5	6	7	8	10	7	16	9	11	221	9.2
" 11	9	9	6	6	7	2	15	2	15	2	9	4	6	5	7	6	8	2	8	1	9	7	9	3	30	2	28	9	23	10	15	6	7	9	8	11	2	2	30	2	4	2	...	1	9	2	7	8	108	4.5
" 12	7	6	...	1	8	3	2	9	3	5	...	1	...	0	2	5	6	4	8	14	7	19	7	22	6	19	7	16	7	18	7	18	6	12	31	9	2	15	2	4	1	11	1	9	2	6	2	7	233	9.7
" 13	29	5	2	10	1	8	2	6	3	7	3	8	2	11	32	12	2	8	31	8	1	9	6	5	3	6	32	14	1	5	32	8	1	6	2	3	...	0	7	7	6	8	10	1	16	1	9	187	7.8
" 14	2	7	1	4	1	8	...	1	5	3	7	7	6	12	7	8	1	2	1	2	8	5	5	13	5	7	6	10	6	19	7	16	7	15	7	17	7	17	7	22	7	21	7	22	7	23	7	23	276	11.5
" 15	7	25	7	23	7	25	7	24	7	27	7	25	7	24	7	21	7	27	7	29	7	29	7	29	7	26	7	27	7	24	8	25	7	24	7	19	8	14	8	17	8	18	8	16	8	14	8	16	548	22.8
" 16	7	13	8	13	7	14	7	17	8	14	7	20	7	23	7	19	7	18	7	17	7	18	8	21	9	20	9	19	8	18	8	18	8	19	8	18	9	20	8	19	8	14	8	18	8	17	8	12	419	17.5
" 17	8	18	8	11	8	9	7	9	7	8	7	10	8	7	8	10	7	9	8	10	9	11	15	9	12	9	15	11	16	10	16	10	15	9	16	5	15	7	10	10	10	10	10	7	13	4	14	3	211	8.8
" 18	30	3	18	6	18	12	18	9	17	7	23	5	22	7	29	7	28	9	25	9	23	10	22	10	22	13	22	14	20	7	22	7	20	14	27	6	24	7	20	8	3	10	1	8	1	5	32	5	194	8.1
" 19	25	5	1	7	1	10	32	8	11	7	1	9	5	5	6	9	9	9	6	12	7	10	8	14	9	7	12	3	8	10	8	14	7	14	8	19	6	18	7	20	7	23	7	24	7	23	7	22	302	12.6
" 20	7	23	7	22	7	22	7	22	7	21	7	25	8	27	7	24	7	21	7	23	8	26	8	28	8	27	8	27	8	22	8	23	8	20	7	20	8	25	9	22	8	22	8	25	9	24	8	19	560	23.3
" 21	8	20	8	15	8	15	8	16	7	13	6	12	6	10	6	8	14	10	16	15	17	16	18	16	18	16	18	18	19	15	18	15	17	18	14	19	18	15	17	17	18	15	18	14	19	18	19	14	346	14.4
" 22	19	18	19	16	20	16	21	13	18	11	20	8	24	4	28	11	29	17	20	18	19	25	19	22	19	21	20	18	19	20	19	16	16	15	19	16	19	16	20	12	22	16	21	9	21	10	21	15	357	14.9
" 23	20	19	21	18	21	20	20	24	21	20	22	12	22	7	22	5	2	12	2	8	8	5	6	18	9	17	10	13	9	8	32	7	1	5	2	8	5	7	7	20	7	32	7	36	7	31	7	28	380	15.8
" 24	7	25	7	28	7	29	7	29	7	30	7	27	7	29	7	25	7	27	7	26	6	35	6	32	7	27	7	28	7	27	7	26	6	28	7	26	8	24	7	17	7	19	7	22	7	25	7	24	624	26.0
" 25	7	22	7	21	6	24	5	23	7	21	7	18	7	20	7	18	7	19	8	15	8	19	9	15	8	14	8	17	8	16	9	16	9	16	10	15	10	16	9	17	8	17	9	14	10	13			421	17.5
" 26	8	11	8	13	8	13	8	13	8	11	6	9	6	7	8	8	9	9	10	11	9	10	12	10	17	10	20	8	22	8	18	8	18	9	18	8	16	8	15	8	14	8	16	8	15	9	14	10	330	13.7
" 27	10	8	10	5	10	8	9	8	9	12	9	12	9	12	8	14	8	12	8	9	...	1	7	9	8	8	8	8	7	12	12	7	8	10	8	9	8	15	8	14	8	11	8	10	7	10	7	9	235	9.8
" 28	6	8	6	6	8	2	4	3	10	2	22	12	28	6	...	1	9	7	7	9	8	26	3	22	4	28	6	20	5	27	6	28	8	28	6	29	4	...	1	29	2	...	1	2	5	10	7	115	4.8
" 29	11	3	...	1	...	0	...	0	...	1	...	1	10	6	8	21	8	24	7	20	8	23	8	26	8	17	9	19	8	19	7	18	7	15	7	15	7	16	7	15	7	15	7	16	7	15	7	15	305	12.7
" 30	7	13	7	7	8	7	6	7	...	1	11	3	11	6	10	7	11	9	9	6	10	11	10	10	11	9	11	4	11	3	...	1	30	4	20	3	31	5	8	7	8	9	10	7	4	7	14	3	149	6.2
" 31	20	3	11	11	7	5	7	3	1	11	2	3	2	3	2	5	2	3	32	5	8	6	9	24	9	30	9	30	9	29	10	21	10	18	10	14	8	12	10	10	10	10	11	11	6	12	7	8	287	12.0
Sums	...	364	...	353	...	358	...	360	...	355	...	339	...	328	...	343	...	386	...	405	...	453	...	503	...	494	...	524	...	476	...	433	...	418	...	407	...	391	...	372	...	405	...	400	...	388	...	361	9,026	401.2
Hourly Means	...	11.7	...	11.4	...	11.5	...	11.6	...	11.5	...	10.9	...	10.6	...	11.1	...	12.5	...	13.1	...	14.6	...	16.2	...	15.9	...	16.9	...	15.4	...	14.0	...	13.5	...	13.1	...	12.6	...	12.9	...	13.1	...	12.9	...	12.5	...	11.6	310.5	12.9

TABLE VIII.

MEAN HOURLY COMPONENTS AND MEAN DIRECTION OF THE WIND, FOR MAY, 1884.

Hour.	Components (miles per hour).						Direction
	N	S	E	W	+N-S	+E-W	
1 a.	0.6	1.1	9.7	1.2	−0.4	+ 8.4	E 22°
2 „	0.8	1.2	9.3	0.8	−0.4	+ 8.4	E 23°
3 „	1.0	1.2	9.1	0.9	−0.2	+ 8.2	E 1°
4 „	1.4	1.3	9.0	1.0	+ 0.1	+ 8.0	E
5 „	1.1	1.4	8.9	0.6	−0.3	+ 8.3	E 2°
6 „	0.8	0.8	8.8	1.0	−0.0	+ 7.8	E
7 „	1.2	0.7	9.0	0.6	+ 0.5	+ 8.4	E 4°
8 „	1.2	0.6	9.1	0.6	+ 0.6	+ 8.5	E 4°
9 „	1.1	1.4	10.2	0.7	−0.3	+ 9.5	E 2°
10 „	1.0	1.5	10.3	0.9	−0.5	+ 9.4	E 3°
11 „	0.8	1.9	11.7	1.1	−1.1	+ 10.5	E 6°
Noon.	0.9	2.6	12.9	1.3	−1.7	+ 11.6	E 9°
1 p.	0.5	2.4	12.9	1.4	−1.9	+ 11.5	E 10°
2 „	0.9	2.7	12.9	1.3	−1.8	+ 11.6	E 9°
3 „	0.4	1.9	12.3	1.6	−1.5	+ 10.7	E 8°
4 „	0.6	2.8	10.4	1.1	−2.2	+ 9.3	E 13°
5 „	1.5	2.3	9.9	1.2	−0.8	+ 8.7	E 5°
6 „	1.4	1.3	9.7	1.5	+ 0.1	+ 8.2	E 1°
7 „	1.3	1.1	9.4	1.6	+ 0.2	+ 7.8	E 1°
8 „	0.6	1.4	9.9	0.7	−0.8	+ 9.2	E 6°
9 „	1.1	1.2	10.9	0.6	−0.1	+ 10.3	E
10 „	1.0	1.2	11.1	0.4	−0.2	+ 10.8	E 1°
11 „	1.3	0.6	10.6	0.5	+ 0.7	+ 10.1	E 4°
Midt.	1.0	1.1	9.6	0.7	−0.1	+ 8.8	E 1°
Mean,.....	1.0	1.5	10.3	1.0	−0.5	+ 9.3	E 3°

TABLE IX.

DIRECTION AND FORCE OF THE WIND, AT VICTORIA PEAK, AND SEA DISTURBANCE

Date.	4 a.			10 a.			4 p.			10 p.	
	Direction	Force.	Sea.	Direction	Force.	Sea.	Direction	Force.	Sea.	Direction	Force.
1884.											
May 1,.....	...	...	3	E	5	3	E	4	2	E	4
„ 2,.....	...	...	1	SE	3	1	E	4	1	SE	4
„ 3,.....	...	...	1	E	4	1	E	3	1	SE	3
„ 4,.....	...	...	1	E	3	2	E	3	3	E	3
„ 5,.....	...	...	3	E	4	3	E	4	3	E	3
„ 6,.....	...	...	4	E	5	5	E	5	5	E	4
„ 7,.....	...	...	4	SE	4	4	SE	3	3	S	3
„ 8,.....	...	...	0	S	3	0	S	3	0	S	3
„ 9,.....	...	...	0	S	3	0	S	3	0	SE	5
„ 10,.....	...	...	0	SW	5	0	S	5	1	SW	5
„ 11,.....	...	...	0	S	4	0	SW	4	0	S	3
„ 12,.....	...	...	1	E	4	2	E	4	4	E	4
„ 13,.....	...	...	3	NNE	4	3	NNE	4	3	NE	4
„ 14,.....	...	...	3	E	4	3	E	4	3	E	4
„ 15,.....	...	...	4	E	5	4	E	5	4	E	5
„ 16,.....	...	...	4	E	5	4	ESE	4	3	SSE	4
„ 17,.....	...	...	0	S	3	0	S	4	0	S	4
„ 18,.....	...	...	0	S	5	0	S	4	0	NE	4
„ 19,.....	...	...	2	E	3	2	E	4	3	E	4
„ 20,.....	...	...	4	E	4	4	S	4	3	S	5
„ 21,.....	...	...	1	SSW	5	1	S	5	1	S	6
„ 22,.....	...	...	1	S	5	1	S	5	2	S	6
„ 23,.....	...	...	1	NE	4	1	NE	3	1	E	6
„ 24,.....	...	...	5	E	5	5	E	5	5	E	5
„ 25,.....	...	...	4	E	4	4	E	3	3	E	3
„ 26,.....	...	...	3	ESE	3	3	E	2	2	E	4
„ 27,.....	...	...	1	S	3	1	S	3	0	S	4
„ 28,.....	...	...	0	SW	3	0	S	4	0	S	4
„ 29,.....	...	...	0	W	2	4	E	3	4	E	4
„ 30,.....	...	...	3	E	2	3	E	1	0	E	2
„ 31,.....	...	...	0	E	3	2	E	4	3	E	4
Mean,.....	...	...	1.9	SE by E	3.8	2.1	SE by E	3.7	2.0	SE by E	4.1

TABLE X.

AMOUNT AND CLASSIFICATION OF CLOUDS AND DIRECTION WHENCE COMING.

DATE.	4 a.			10 a.			4 p.			10 p.		
	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction
1864.												
1, ...	9	cum.	E	10	cum-nim.	E	10	nim.	...	2	c-cum.	...
2, ...	4	str.	...	7	c-cum. / cum.	WSW / ESE	2	c-str. / cum.	WNW / W	9	sm-cum.	WSW
3, ...	7	cum.	...	5	c-cum. / cum.	W / W	7	c-str. / cum-str.	W / W	10	nim.	W
4, ...	6	str.	NE	6	c-cum. / cum.	W / SE	6	c-cum.	SW	10	c-cum. / cum.	SW / ESE
5, ...	10	cum.	...	6	c-cum. / R-cum.	WSW / E	7	cum. / cum-str.	ENE / WSW	10	cnin.	ESE
6, ...	6	cum.	SE	10	nim.	E	10	cum-nim.	E	10	nim.	E
7, ...	10	cum.	E	9	cum. / cum-nim.	SW / E	9	c-str. / cum. / c-cum.	W / S / W	2	cum.	S
8, ...	4	c. / c-cum.	SSW	4	cum.	SW	8	c-cum. / cum-str.	W / WSW	4	c-cum. / cum.	W / SW
9, ...	10	str.	S	9	c-cum. / R-cum.	WSW / SSW	10	nim. / cum.	SSW	10	cum-nim.	SW
10, ...	10	nim.	S	10	cum-str. / cum-nim.	SSE	10	nim.	SW	10	cum-str.	W
11, ...	10	cum-nim.	S	10	cum-str. / R-cum.	SW	10	nim.	...	5	c-str. / cum.	WSW
12, ...	10	cum-nim.	E	9	c-cum. / R-cum.	W / E	10	nim.	E	10	R-cum.	ENE
13, ...	10	cum-nim.	E	10	str.	...	9	cum. / R-cum.	SW / WNW	7	sm-cum. / str.	WNW / NE
14, ...	10	c-cum.	WSW	10	nim.	ENE	9	sm-cum. / R-cum.	WSW / ENE	10	R-cum.	ENE
15, ...	9	c-cum. / cum.	SW / E	5	cum.	WSW	5	c-cum.	WSW	6	cum.	E
16, ...	10	cum.	E	8	R-cum.	ESE	10	cum-nim.	E	9	cum-nim.	E
17, ...	10	cum.	S	7	c-cum. / cum.	WSW / SSW	5	cum. / c-str.	SW / W	2	cum.	SW
18, ...	10	cum.	S	10	cum-str. / cum.	SW	10	cum-str. / cum.	SW / SW	10	str.	...
19, ...	10	str.	W	10	R-cum.	SSW	10	cum-nim.	E	10	nim.	E
20, ...	10	cum.	E	10	cum-nim.	E	9	c-cum. / R-cum.	WSW / SW	3	cum-nim.	SE
21, ...	10	nim.	S	8	c-cum. / cum.	W / SSW	10	cum-str. / R-cum.	SW	8	cum.	SW
22, ...	5	c-cum. / cum.	SW / S	6	R-cum.	WSW	5	cum.	WSW	9	cum-str. / cum.	WSW
23, ...	6	cum.	S	10	cum-str. / cum.	W	10	str. / cum-nim.	NNE	10	nim.	...
24, ...	10	cum-nim.	NE	10	str. / cum-nim.	ENE	10	str. / cum-nim.	E	10	cum-nim.	ENE
25, ...	2	cum.	...	10	nim.	E	10	cum. / R-cum.	W / E	5	cum.	WSW
26, ...	4	cum.	E	5	cum-str. / cum.	SE	7	sm-cum. / cum.	WSW / SW	2	cum.	SE
27, ...	2	cum.	...	10	nim.	SW	9	cum-str. / cum.	SW	7	cum-str. / cum.	SW
28, ...	10	nim.	E	10	str. / cum.	SW	10	cum-str. / cum.	WSW	10	cum.	WSW
29, ...	2	cum.	S	10	cum. / cum-nim.	SW / ENE	10	nim.	ENE	10	nim.	...
30, ...	10	nim.	E	10	cum.	W	10	cum-str. / cum.	W	10	cum.	ENE
31, ...	10	nim.	E	4	sm-cum.	W	2	c-cum.	WNW	1	c-cum.	...
Mean.....	7.9	...	...	8.3	...	...	8.4	...	...	7.5	...	...

TABLE XI.
VICTORIA PEAK.

Date.	Barometer.			Temperature.						
	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.	Sun.	Max.	Min.	R
1884.	ins.	ins.	ins.	°	°	°	°	°	°	
May 1,.....	28.141	28.088	28.064	67.8	65.8	62.6	106.0	71.7	61.0	6
„ 2,.....	28.132	28.059	28.128	69.8	71.2	69.6	135.2	72.1	63.0	6
„ 3,.....	28.117	28.142	28.104	71.8	73.0	69.8	142.2	74.9	66.0	6
„ 4,.....	28.111	28.072	28.137	68.8	69.2	66.8	117.0	71.3	66.2	6
„ 5,.....	28.144	28.103	28.161	66.8	67.8	67.6	145.0	70.9	65.2	6
„ 6,.....	28.124	28.056	28.112	66.8	65.6	65.6	86.2	67.9	65.0	6
„ 7,.....	28.062	27.993	28.004	68.8	69.6	67.8	131.0	71.9	65.2	6
„ 8,.....	28.001	27.949	27.969	69.8	70.8	69.8	134.2	71.9	65.0	6
„ 9,.....	28.012	27.967	28.019	71.0	71.2	71.0	114.2	71.9	67.2	6
„ 10,.....	28.037	27.984	28.072	71.4	72.4	69.8	114.0	72.9	66.0	6
„ 11,.....	28.063	28.038	28.004	71.4	69.0	67.8	102.0	71.8	65.4	6
„ 12,.....	28.095	28.051	28.082	66.8	64.4	63.4	101.0	67.9	63.0	6
„ 13,.....	28.066	28.039	28.090	67.8	60.8	60.0	125.0	70.9	57.8	6
„ 14,.....	28.098	28.060	28.112	59.6	61.2	61.2	115.0	63.1	57.2	5
„ 15,.....	28.135	28.099	28.105	63.8	64.8	63.8	132.0	66.9	61.0	6
„ 16,.....	28.122	28.064	28.079	66.8	68.0	68.8	132.2	69.9	63.0	6
„ 17,.....	28.110	28.039	28.054	71.0	72.2	73.8	141.0	75.9	67.0	6
„ 18,.....	28.081	28.028	28.105	72.8	72.8	70.8	131.0	74.1	70.0	6
„ 19,.....	28.124	28.066	28.123	65.0	65.6	64.8	102.0	70.9	64.2	6
„ 20,.....	28.090	28.046	28.056	66.8	70.0	70.8	137.8	70.9	65.0	6
„ 21,.....	28.043	27.957	27.971	72.8	73.8	73.8	122.0	73.9	69.0	7
„ 22,.....	27.990	27.889	27.904	74.8	74.8	75.0	122.0	76.9	72.0	7
„ 23,.....	27.976	27.968	28.019	71.8	71.8	68.6	114.2	73.9	68.0	6
„ 24,.....	28.040	28.020	28.035	66.2	65.2	66.8	131.8	68.9	63.0	6
„ 25,.....	28.089	28.051	28.094	64.8	67.8	66.6	111.0	69.3	63.0	6
„ 26,.....	28.114	28.058	28.103	69.8	71.0	68.8	132.2	71.9	64.0	6
„ 27,.....	28.071	28.021	28.036	71.8	72.6	71.4	106.0	72.6	68.0	6
„ 28,.....	27.993	27.897	27.919	70.6	69.8	69.8	111.0	71.9	67.0	6
„ 29,.....	27.865	27.778	27.861	69.2	67.8	68.8	107.2	69.9	64.0	6
„ 30,.....	27.925	27.903	27.976	70.8	70.8	67.8	129.0	70.9	66.0	6
„ 31,.....	27.977	27.950	28.001	73.6	70.8	68.0	133.0	73.8	66.1	6
Mean,.....	28.063	28.014	28.048	68.7	69.1	68.1	121.4	71.4	64.9	6

TABLE XII.
TEMPERATURE.

Date.	Cape d'Aguilar.					
	4 a.	10 a.	4 p.	10 p.	Max.	Min.
1884.	°	°	°	°	°	°
May 1,.....	69.1	69.6	69.6	67.8	70.8	66.6
„ 2,.....	69.6	70.8	74.6	71.6	75.2	68.5
„ 3,.....	71.1	76.6	73.6	70.2	77.7	68.6
„ 4,.....	71.5	74.6	73.8	73.4	74.6	69.8
„ 5,.....	70.3	70.6	73.1	71.8	74.6	69.6
„ 6,.....	71.1	70.4	69.8	70.6	72.8	69.8
„ 7,.....	71.3	72.8	72.6	71.9	73.8	70.6
„ 8,.....	72.4	78.6	77.2	74.6	80.8	71.8
„ 9,.....	74.6	77.1	76.6	72.0	78.8	72.0
„ 10,.....	75.1	76.6	77.8	70.0	80.6	70.0
„ 11,.....	70.9	75.6	69.6	69.6	78.8	69.6
„ 12,.....	71.6	72.6	67.6	64.8	74.8	64.8
„ 13,.....	64.1	65.8	67.1	67.2	68.8	62.8
„ 14,.....	64.6	64.8	69.6	70.6	71.3	64.3
„ 15,.....	70.6	71.6	71.8	71.6	72.8	69.8
„ 16,.....	71.6	72.6	72.6	72.1	74.0	71.4
„ 17,.....	73.6	76.6	79.6	76.4	86.3	72.1
„ 18,.....	76.3	79.9	80.6	69.6	82.0	69.6
„ 19,.....	70.1	71.5	69.1	69.5	72.2	69.1
„ 20,.....	69.6	70.3	72.1	71.7	72.6	69.1
„ 21,.....	72.8	76.6	78.8	77.1	82.8	72.0
„ 22,.....	77.6	81.6	79.6	78.4	83.8	76.1
„ 23,.....	78.1	74.0	75.6	72.1	79.8	72.1
„ 24,.....	71.1	72.6	71.8	70.6	74.0	70.6
„ 25,.....	73.6	68.6	72.4	71.6	73.7	68.6
„ 26,.....	72.2	74.6	75.6	73.6	76.8	71.1
„ 27,.....	74.2	75.9	76.6	74.6	76.8	73.8
„ 28,.....	75.6	75.2	74.6	74.1	77.6	74.0
„ 29,.....	73.8	74.6	73.6	71.6	75.8	71.6
„ 30,.....	72.3	76.1	76.6	72.6	76.8	71.6
„ 31,.....	74.6	78.6	76.4	75.0	81.8	72.6
Mean, ...	72.1	73.8	73.9	71.9	76.5	70.1

TABLE XIII.
RELATIVE HUMIDITY.

Date.	Observatory.			Cape d'Aguilar.				Victoria Peak.		
	10 a.	4 p.	10 p.	4 a.	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.
1884.										
May 1,	93	91	91	98	95	97	96	99	99	97
2,	90	77	96	100	100	97	100	95	89	85
3,	83	81	94	99	93	98	95	95	93	80
4,	82	82	92	91	88	91	93	95	96	99
5,	81	72	88	95	95	90	98	98	90	97
6,	87	88	93	90	92	97	100	99	97	99
7,	86	86	95	97	93	96	100	95	95	99
8,	83	75	93	98	89	90	97	99	95	99
9,	83	83	93	97	99	100	98	98	98	99
10,	89	87	95	99	97	92	100	97	99	80
11,	82	97	95	100	86	100	100	99	98	91
12,	77	90	87	95	85	100	96	96	98	99
13,	71	63	72	95	80	74	82	99	88	88
14,	84	69	75	87	93	77	78	94	91	97
15,	69	61	86	83	78	77	90	87	84	99
16,	81	84	94	91	93	93	100	99	98	99
17,	85	68	92	99	97	91	98	98	98	99
18,	85	77	83	94	96	93	92	99	99	99
19,	73	90	94	82	88	95	100	88	97	99
20,	87	79	95	99	93	90	99	99	99	99
21,	81	82	89	96	93	95	99	99	99	99
22,	83	71	89	93	91	98	98	99	99	99
23,	79	82	88	99	96	93	90	95	99	95
24,	69	67	73	90	83	77	99	87	88	90
25,	89	73	88	79	98	83	93	98	95	95
26,	80	80	93	94	91	90	95	99	94	99
27,	92	80	95	98	95	93	100	99	97	96
28,	92	85	94	99	99	100	99	96	99	99
29,	88	91	95	100	88	88	100	99	99	99
30,	68	67	78	96	82	78	88	67	81	85
31,	58	56	84	76	82	75	86	66	76	66
Mean,	82	79	89	94	91	91	95	95	94	94

TABLE XIV.
TENSION OF AQUEOUS VAPOUR EXPRESSED IN INCHES OF MERCURY.

Date.	Observatory.			Victoria Peak.		
	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.
1884.						
May 1,	0.703	0.703	0.656	0.678	0.633	0.553
2,	0.800	0.825	0.784	0.690	0.680	0.613
3,	0.836	0.833	0.734	0.739	0.751	0.583
4,	0.766	0.757	0.722	0.666	0.675	0.655
5,	0.700	0.715	0.735	0.648	0.608	0.660
6,	0.676	0.691	0.719	0.655	0.615	0.629
7,	0.792	0.769	0.755	0.666	0.685	0.678
8,	0.780	0.818	0.815	0.726	0.714	0.726
9,	0.875	0.851	0.760	0.749	0.754	0.757
10,	0.868	0.889	0.727	0.751	0.793	0.583
11,	0.794	0.763	0.734	0.767	0.701	0.621
12,	0.707	0.676	0.558	0.634	0.596	0.582
13,	0.462	0.444	0.495	0.478	0.440	0.463
14,	0.560	0.557	0.557	0.479	0.496	0.526
15,	0.553	0.579	0.661	0.520	0.513	0.591
16,	0.697	0.743	0.783	0.655	0.676	0.702
17,	0.876	0.834	0.863	0.749	0.772	0.832
18,	0.898	0.848	0.674	0.801	0.804	0.751
19,	0.633	0.709	0.694	0.543	0.615	0.612
20,	0.727	0.738	0.762	0.655	0.732	0.751
21,	0.866	0.894	0.899	0.804	0.832	0.832
22,	0.918	0.914	0.931	0.860	0.860	0.866
23,	0.797	0.767	0.722	0.738	0.777	0.668
24,	0.607	0.571	0.556	0.560	0.547	0.587
25,	0.690	0.707	0.709	0.605	0.643	0.622
26,	0.782	0.806	0.799	0.726	0.711	0.701
27,	0.855	0.868	0.847	0.777	0.774	0.743
28,	0.884	0.818	0.835	0.723	0.726	0.726
29,	0.799	0.784	0.758	0.711	0.678	0.701
30,	0.714	0.685	0.671	0.503	0.605	0.574
31,	0.637	0.621	0.717	0.549	0.570	0.448
Mean,	0.750	0.748	0.730	0.671	0.651	0.663

TABLE XV.

RAINFALL AT DIFFERENT STATIONS.

Date.	Observatory.		Stone Cutters' Island.	Victoria Peak
	Amount.	Duration.	Amount.	Amount.
1884.	ins.	hrs.	ins.	ins.
May 1,.....	2.575	6	1.53	3.20
„ 2,.....	0.000	0	...	...
„ 3,.....	0.135	1	0.23	0.08
„ 4,.....	0.000	0	...	...
„ 5,.....	0.050	3	0.05	...
„ 6,.....	0.210	8	0.17	0.27
„ 7,.....	0.010	0	...	...
„ 8,.....	0.000	0	...	...
„ 9,.....	0.565	6	0.51	0.85
„ 10,.....	1.285	5	2.40	1.35
„ 11,.....	1.180	5	1.07	1.04
„ 12,.....	0.135	10	0.18	0.36
„ 13,.....	0.000	0	...	...
„ 14,.....	0.000	0	...	...
„ 15,.....	0.000	0	...	...
„ 16,.....	0.015	2	...	...
„ 17,.....	0.000	0	...	...
„ 18,.....	0.660	3	0.65	0.50
„ 19,.....	0.175	5	0.14	0.25
„ 20,.....	0.010	0	0.03	...
„ 21,.....	0.000	0	...	...
„ 22,.....	0.135	1	0.05	0.45
„ 23,.....	0.025	4	...	0.15
„ 24,.....	0.040	3	...	...
„ 25,.....	0.005	0	...	...
„ 26,.....	0.035	1	...	...
„ 27,.....	1.470	5	1.26	1.78
„ 28,.....	0.140	4	0.04	0.37
„ 29,.....	0.110	5	0.07	0.37
„ 30,.....	0.000	0	...	...
„ 31,.....	0.000	0	...	...
Total,.....	8.965	77	8.36	11.02

Hongkong Observatory, 18th July, 1884.

W. Doberck.
Government Astronomer

HONGKONG OBSERVATORY.

Weather Report for June. 1884.

In the *China Coast Meteorological Register*, based on information transmitted by the Great Northern and the Eastern Extension Telegraph Companies—which I have published daily, is given a summary of the atmospheric circumstances in Manila and along the Coast of China as far north as Shanghai. It also contains information concerning the weather in Nagasaki and Wladiwostock.

During the previous month the Barometric pressure in these regions had been very evenly distributed, but so that gradients for gentle NE winds, which prevailed during the first part of that month were gradually replaced by gradients for gentle SW winds. From the 1st to the 9th of June gradients for moderate SE winds prevailed and were about the latter date replaced by gradients for SW winds, which did not vary much up to the date that the Typhoon made its influence felt. At the beginning of the month the weather was fine and dry, the Barometer rising and light NE breezes were felt. On the 4th a change set in with strong NE breezes, a falling Barometer and Temperature and rising Humidity. On the 7th the NE breezes moderated but continued up to the 12th, the weather being overcast and damp. On the 13th moderate SW winds, which had prevailed in the Southern portion of the China Sea during the whole month, set in and brought with them overcast but warm and rather dry weather, and the Barometer rose. On the 16th the Barometer and Temperature began to fall and the Humidity to rise, while the SW wind decreased in force. On the 18th the wind freshened and brought rainy and squally weather. Next day the Barometer rose and the Temperature fell. On the 21st the Barometer began to fall and the Temperature rose with moderate SW winds and squalls from NW. On the 25th the Barometer rose, fell from the 26th to the 28th and then rose again. This was owing to a typhoon (No. 1 of 1884) that passed over Luzon, recurved in the neighbourhood of the Pratas Shoal and proceeded between the Pescadores and the South Cape of Formosa. Being unable to cross the high mountains North of Takao, its path was deflected and it moved northwards with decreasing violence. It re-entered the Pacific North of Formosa. Light winds prevailed here until the morning of the 30th when a fresh SW breeze was felt.

The Barograph and the Standard Barometer at the Observatory are placed 110 feet above Mean Sea Level. The bulbs of the Thermograph Thermometers are 111 feet above Mean Sea Level and 6 feet above the ground. They are exposed in an unpainted and double-louvered zinc screen fixed to the north wall of the main building in a shaded position. The Solar Radiation Maximum Thermometer is 109 feet above Mean Sea Level and 4 feet above the ground, and the Terrestrial Radiation Minimum Thermometer is about one inch above the ground. They are placed over dry earth, as the ground round the Observatory has not yet been turfed. The self-recording Rain-gauge is placed 106 feet above Mean Sea Level, and the rim, which is 11¼ inches in diameter, is 21 inches above the ground. The cups of the Anemograph are 45 feet above the ground, and 150 feet above Mean Sea Level.

At Victoria Peak the Instruments, except the Radiation Thermometers, are placed in the Look-out. The Barometer is about 1823 feet above Sea Level. The bulbs of the Thermometers are about 4 feet above the floor, except the Maximum Thermometer, which is a few inches higher. The Radiation Thermometers, are placed at the same height above the ground as at the Observatory. At Cape d'Aguilar the Thermometers are placed about 170 feet above Sea Level (according to the *Government Gazette*) in a wooden screen 2 feet above the ground, except the Maximum Thermometer, which is a few inches higher.

Table I exhibits the hourly readings of the height of the Barometer reduced to 32.0 Fahrenheit, but not to Sea Level, as measured (at two minutes to the hour named) from the Barograms. The Mean Height of the Barometer was 29.662, the Highest was 29.791 at 10 p. on the 3rd, and on the 20th, and the Lowest was 29.444 at 4 p. on the 28th. The Barometric Tide amounted to 0.068.

Table II exhibits the hourly readings of the Temperature (Dry Bulb Thermometer) as measured from the Thermograms (at two minutes past the hour named), and also the Extreme Temperatures during the day. The Mean Temperature was 80.1, the Highest was 91.1 at about 2 p. on the 22nd and the Lowest was 72.6 at about 4 a. on the 1st.

Table III exhibits the hourly readings of the Temperature of Evaporation (Damp Bulb Thermometer) as measured from the Thermograms (at two minutes past the hour named) and also the Solar Radiation Maximum (Black Bulb) and Terrestrial Radiation Minimum Temperatures.

Table IV exhibits the Mean Relative Humidity in percentage of saturation (the humidity of air saturated with moisture being 100) and the Mean Tension of Aqueous Vapour present in the air expressed in inches of mercury, for every hour in the day and for every day in the month. The Mean Tension, which exhibits a small daily variation, was 0.850. The Mean Relative Humidity, which exhibits a great daily variation, was 83.

Table V exhibits the Duration of Sun-shine as registered by aid of the Sun-shine Recorder from half an hour before to half an hour after the hour named. The Sun shone 149.2 hours during the month.

Table VI exhibits the amount of Rain registered from half an hour before to half an hour after the hour named. The Total Rain-fall during the month was 11.035 inches. It rained during 81 hours. The greatest Hourly Rain-fall was 2.050 at 6 a. on the 30th.

Table VII exhibits, for every hour in the day, the Velocity of the Wind and its Direction in numbers (8=E, 16=S, 24=W, 32=N) as measured from the Anemograms. The Velocity is the number of miles traversed by the Wind, from half an hour before to half an hour after the hour named. The Direction is read off at the hour, except when the Wind is very light and changeable, when the average Direction during the hour is estimated, taking into account the Velocity from different quarters. The Direction is not noted when the Velocity is below 1.5 miles an hour.

The Mean Velocity was 14.7 miles an hour. It was greatest during the middle of the day. The Velocity exceeded 35 miles an hour at Noon on the 3rd.

The Total Distance travelled by, as well as the Duration and average Velocity of Winds from different quarters were as follows:—

Direction.	*Total Distance.*	*Duration.*	*Velocity.*
	Miles.	Hours.	Miles per hour.
N	37	4	9.2
NE	262	22	11.9
E	5,285	332	15.9
SE	742	62	12.0
S	2,036	130	15.7
SW	1,665	101	16.5
W	396	34	11.6
NW	115	16	7.2
Calm	15	19	0.8

Table VIII exhibits, for every hour in the day, the Velocity of the Wind reduced to 4 and also to 2 Directions, as well as the Mean Direction of the Wind. The Diurnal Variation of the latter was small.

Table IX exhibits the Direction (to two points) and Force of the Wind (0-12) at Victoria Peak. The Average Force of the Wind was 4.0 corresponding to 23 miles an hour. The Sea Disturbance (0-9) exhibited in the same table has been derived from observations made at Cape d'Aguilar.

Table X exhibits the Amount (0-10), Name and Direction, whence coming, of the Clouds. Where the names of Upper and Lower Clouds are given, but only one Direction, this refers to the Lower Clouds. The prevailing Direction of the Wind at the Observatory, as shewn in Table VIII, was about SE; at the Peak, as shewn in Table IX, E 27° S; the Direction of the Lower Clouds was E 32° S. The Upper Clouds came from about WSW until the 25th when their Direction changed to NE, thus indicating the existence of a Typhoon. On the 29th their Direction again changed to WSW. On an average 71 per cent of the sky were clouded.

Table XI and Table XII exhibit the readings of the Barometer reduced to 32.0 Fahrenheit but not to Sea Level, and the Thermometers at Victoria Peak and at Cape d'Aguilar.

The Mean Height of the Barometer at the Peak was 27.965. The Mean Temperature was 72.4 at the Peak and 78.6 at Cape d'Aguilar, the Highest was 79.7 on the 27th at the Peak and 87.8 on the 26th and 27th at Cape d'Aguilar, and the lowest was 65.0 on the 2nd at the Peak, and 72.4 on the previous day at Cape d'Aguilar.

The Mean Temperature in Hongkong decreased one degree Fahrenheit for every 248 feet ascended.

Table XIII exhibits the Relative Humidity as determined from observations of the Dry and Damp Bulb Thermometers. The Mean Relative Humidity at the Observatory was 83, at Cape d'Aguilar 91, and at Victoria Peak 95. The Least Relative Humidity registered was 52 at 4 p. on the 2nd at the Observatory; 78 at the same time at the Peak, and 78 at 4 p. on the 27th at Cape d'Aguilar.

Table XIV exhibits the Tension of Aqueous Vapour at the Observatory and at the Peak. The Mean Tension was 0.849 at the Observatory, and 0.766 at the Peak. These numbers are reduced to the mean of the 24 hours by aid of Table IV. The Greatest Tension registered was 0.992 at 10 p. on the 29th at the Observatory, and 0.876 at 10 a. on 26th at the Peak. The Least Tension was 0.647 at 4 p. on the 2nd at the Observatory, and 0.618 at 10 a. on the 1st at the Peak.

Table XV exhibits the amount of Rain measured at 10 a. on the following day, and the duration of Precipitation at the Observatory. The greatest amount fell on the 29th when it rained 2.585 at the Observatory, 2.66 at Stone Cutters' Island, and 2.10 at the Peak.

Lightning was seen at 8 p. on the 10th, at 1 a. on the 13th, in the evening of the same day, and in the evenings of the 14th and the 15th.

A Thunderstorm passed at 7 h. 30 m. on the 17th but not very close.

Strong Lightning continued during the night between the 18th and the 19th.

Lightning and distant Thunder were registered during the afternoon of the 19th, and likewise during the following afternoon and up to the morning of the 21st.

Thunder was heard in the afternoon of the 24th, and Lightning was seen the following night. Faint Lightning was also seen in the evening of the 26th.

Lightning was seen in the afternoon of the 29th and the following night. A Thunderstorm passed next morning. It was nearest at about 6 a. on the 30th.

Unusual Visibility was noticed on the 6th, the 15th, the 22nd, the 23rd, the 25th, the 26th, the 27th and the 28th.

Dew fell during the night between the 2nd and the 3rd and in the evening of the 26th.

Lunar Coronas were seen on the 1st, the 3rd, and the 9th.

TABLE I.

BAROMETRIC PRESSURE FOR THE MONTH OF JUNE, 1884.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means.
June 1, ...	29.690	29.687	29.677	29.685	29.684	29.710	29.714	29.728	29.734	29.742	29.726	29.713	29.684	29.669	29.669	29.649	29.649	29.654	29.677	29.705	29.711	29.731	29.734	29.720	29.698
„ 2, ...	.712	.702	.696	.704	.708	.727	.749	.755	.753	.743	.714	.734	.711	.698	.689	.680	.685	.700	.724	.732	.748	.758	.753	.746	.723
„ 3, ...	.729	.725	.712	.714	.726	.734	.754	.766	.768	.774	.776	.768	.758	.742	.734	.719	.724	.734	.750	.768	.782	.791	.774	.759	.749
„ 4, ...	.738	.722	.722	.724	.728	.740	.757	.777	.777	.778	.773	.764	.735	.723	.711	.695	.690	.717	.733	.760	.771	.765	.762	.759	.743
„ 5,	.741	.727	.709	.702	.710	.719	.733	.753	.759	.748	.753	.751	.729	.717	.676	.661	.657	.670	.686	.704	.717	.739	.724	.711	.716
„ 6, ...	.688	.681	.657	.655	.660	.666	.677	.699	.708	.704 †	.704 †	.687 †	.672 †	.647 †	.640 †	.625 †	.621 †	.632 †	.648 †	.673 †	.687 †	.700 †	.702 †	.690	.672
„ 7, ...	.675	.669	.662	.657	.661	.687	.690	.696	.697	.701	.701	.687	.674	.671	.656	.625	.631	.657	.670	.680	.705	.709	.707	.705	.678
„ 8, ...	.692	.673	.667	.664	.669	.686	.687	.699	.707	.705	.705	.701	.673	.659	.653	.625	.628	.638	.661	.669	.685	.703	.703	.701	.677
„ 9, ...	.688	.677	.657	.634	.639	.660	.667	.663	.667	.661	.651	.651	.639	.623	.603	.592	.587	.601	.611	.631	.641	.644	.644	.625	.640
„ 10, ...	.610	.603	.592	.589	.589	.609	.629	.643	.643	.641	.637	.637	.623	.612	.577	.559	.569	.588	.601	.625	.637	.657	.658	.650	.616
„ 11, ...	.637	.628	.615	.613	.616	.635	.641	.653	.660	.664	.664	.664	.647	.627	.623	.613	.624	.641	.655	.669	.687	.701	.698	.689	.648
„ 12, ...	.673	.670	.663	.668	.665	.668	.672	.692	.705	.703	.707	.703	.687	.689	.683	.663	.662	.671	.682	.695	.697	.708	.704	.702	.685
„ 13, ...	.688	.673	.665	.663	.668	.679	.683	.703	.704	.701	.700	.695	.667	.668	.656	.654	.653	.661	.670	.699	.711	.715	.705	.695	.682
„ 14, ...	.690	.683	.683	.686	.687	.707	.711	.720	.727	.726	.736	.717	.705	.697	.691	.682	.680	.687	.693	.713	.719	.733	.739	.733	.706
„ 15, ...	.720	.720	.717	.710	.707	.719	.729	.741	.742	.743	.741	.737	.724	.716	.689	.683	.683	.687	.693	.713	.720	.729	.721	.721	.717
„ 16, ...	.715	.711	.698	.695	.693	.707	.717	.717	.715	.714	.705	.687	.668	.649	.645	.640	.639	.640	.666	.678	.686	.701	.696	.694	.686
„ 17, ...	.676	.661	.652	.658	.666	.681	.683	.694	.705	.719	.696	.669	.653	.638	.627	.626	.614	.625	.636	.654	.665	.680	.677	.664	.663
„ 18, ...	.646	.630	.622	.615	.618	.636	.645	.658	.658	.666	.667	.657	.638	.639	.625	.613	.617	.629	.638	.653	.670	.681	.675	.659	.644
„ 19, ...	.655	.651	.641	.635	.636	.649	.667	.668	.675	.684	.685	.691	.670	.670	.656	.652	.644	.663	.682	.719	.734	.731	.733	.727	.676
„ 20, ...	.727	.723	.706	.703	.705	.716	.733	.743	.723	.741	.754	.751	.755	.743	.730	.757	.763	.749	.757	.781	.788	.791	.789	.773	.746
„ 21, ...	.754	.732	.728	.728	.740	.747	.752	.774	.774	.773	.773	.766	.749	.728	.710	.695	.681	.686	.700	.728	.729	.748	.738	.723	.736
„ 22, ...	.706	.691	.681	.680	.678	.691	.705	.717	.722	.735	.731	.715	.696	.681	.679	.653	.647	.647	.652	.676	.692	.695	.694	.684	.689
„ 23, ...	.663	.649	.643	.635	.633	.651	.657	.670	.675	.678	.671	.666	.645	.631	.607	.593	.599	.597	.600	.619	.641	.653	.664	.659	.642
„ 24, ...	.641	.629	.620	.613	.615	.622	.618	.631	.621	.625	.629	.611	.597	.597	.579	.556	.558	.575	.605	.642	.659	.677	.682	.683	.620
„ 25, ...	.676	.672	.656	.655	.669	.675	.681	.693	.706	.707	.701	.696	.685	.678	.667	.651	.649	.649	.653	.672	.678	.694	.689	.677	.676
„ 26, ...	.664	.655	.646	.650	.653	.653	.655	.666	.666	.665 *	.66 *	.64 *	.628 *	.61 *	.58	.564 *	.56 *	.56 *	.57 *	.59 *	.60	.607 *	.60 *	.59	.623
„ 27, ... *	.58	.570 *	.57 *	.56 *	.56 *	.56 *	.57 *	.57 *	.57	.574 *	.57 *	.55 *	.528 *	.51 *	.48	.465 *	.48 *	.49 *	.49 *	.50 *	.52	.519 *	.52 *	.51	.534
„ 28, ... *	.51	.505 *	.50 *	.50 *	.50 *	.50 *	.51 *	.51 *	.52	.517 †	.519 †	.492	.469	.464	.449	.444 †	.477 †	.495 †	.491 †	.518 †	.527	.526 †	.517 †	.511	.499
„ 29, ...	.494 †	.478 †	.478 †	.490 †	.492 †	.499 †	.501 †	.510 †	.530	.544 †	.542 †	.520	.490	.470	.456	.460	.457	.469	.504	.512	.528	.544	.541	.531	.502
„ 30, ...	.514	.503	.495	.503	.518	.579	.584	.577	.579	.582	.582	.571	.566	.568	.553	.547	.545	.553	.556	.583	.602	.609	.601	.600	.561
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hourly Means, ...	29.666	29.657	29.648	29.646	29.650	29.664	29.672	29.683	29.686	29.689	29.687	29.677	29.659	29.648	29.634	29.621	29.622	29.632	29.645	29.665	29.678	29.688	29.685	29.676	29.662

* Interpolated (Photography failed).

† Approximate Reading.

TABLE II.

TEMPERATURE FOR THE MONTH OF JUNE, 1884.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means	Max.	Min.
June 1,	73.5	73.3	73.1	72.9	72.8	73.3	74.7	76.1	77.3	78.1	79.5	81.5	83.0	82.9	84.0	84.0	82.6	79.7	77.0	75.2	74.7	74.3	74.1	73.9	77.1	84.4	72.6
„ 2,	74.0	73.4	73.8	73.7	73.2	73.6	75.4	76.9	79.1	81.1	82.9	84.7	85.6	86.2	86.4	85.9	83.2	81.2	78.6	76.7	76.1	75.6	75.0	74.3	78.6	87.1	73.1
„ 3,	74.5	74.3	74.0	73.9	74.1	74.8	75.4	76.3	77.6	78.3	79.0	80.1	81.8	82.2	82.9	81.1	80.1	78.2	76.2	75.7	75.3	75.4	75.2	75.0	77.1	83.0	73.9
„ 4,	74.7	74.3	74.7	74.4	74.2	74.4	74.9	75.8	77.1	78.1	80.4	81.6	82.9	84.1	85.1	80.4	80.1	78.1	77.1	76.8	76.8	76.4	76.2	76.0	77.7	85.2	74.1
„ 5,	75.8	75.6	75.2	75.2	75.2	75.3	75.5	76.2	76.2	76.7	77.3	77.4	80.0	74.6	76.3	77.1	76.9	75.8	75.5	75.8	76.2	76.2	76.3	75.3	76.1	80.0	74.4
„ 6,	75.2	75.2	75.3	75.3	75.1	75.1	76.3	77.7	76.8	77.7	79.4	80.8	82.0	84.0	83.7	83.0	81.4	79.1	77.3	76.9	76.2	75.6	75.3	75.2	77.9	85.1	74.9
„ 7,	75.5	75.4	75.4	75.0	75.2	75.1	76.4	78.1	79.3	80.2	80.4	80.9	81.1	81.7	81.1	80.8	80.1	78.4	77.1	76.4	76.4	76.2	76.2	76.2	77.9	82.0	74.8
„ 8,	76.0	75.7	75.1	74.8	75.1	75.0	75.3	76.4	77.7	79.3	80.1	80.5	82.8	84.8	85.1	83.5	82.0	79.1	77.3	76.8	76.6	76.3	76.7	76.5	78.3	85.8	74.8
„ 9,	76.0	75.8	75.3	74.9	74.8	75.1	75.9	77.3	77.0	79.6	80.3	82.4	84.1	84.9	84.8	83.0	80.4	79.3	78.2	77.9	77.9	77.8	77.7	77.1	78.6	85.5	74.7
„ 10,	77.2	77.0	76.8	76.4	76.3	76.9	77.9	80.0	81.0	83.3	85.5	83.3	83.5	83.4	83.2	84.0	81.4	79.9	78.4	78.1	78.1	78.1	78.0	77.8	79.8	85.6	76.3
„ 11,	77.6	77.6	77.3	77.1	77.0	77.2	78.8	79.6	81.0	80.9	82.5	83.4	85.0	82.5	80.9	80.1	78.7	77.1	77.5	77.5	78.0	78.0	78.0	77.9	79.2	85.2	76.9
„ 12,	77.5	77.2	77.1	76.9	76.8	77.4	78.9	78.4	80.0	80.0	81.1	79.9	77.3	76.8	76.3	77.1	76.4	76.0	76.0	76.0	76.3	76.5	76.5	76.7	77.5	81.3	75.9
„ 13,	76.9	77.0	77.2	78.0	78.6	79.1	79.9	77.2	78.8	81.0	82.1	82.2	81.3	81.3	81.6	81.4	80.9	80.8	80.2	80.0	79.9	79.8	79.2	79.7	79.8	82.6	76.7
„ 14,	79.9	80.0	80.1	80.0	80.1	80.2	80.9	82.1	83.0	83.2	84.3	84.1	87.0	85.5	85.5	85.0	83.3	82.1	81.3	80.9	80.4	80.1	80.3	80.4	82.1	87.2	79.8
„ 15,	80.3	80.2	80.2	80.2	80.3	80.3	81.0	81.7	82.3	83.6	84.2	85.4	87.1	87.8	89.3	90.1	88.2	85.1	83.2	82.1	81.8	81.8	81.6	81.4	83.3	90.4	80.1
„ 16,	81.3	81.1	81.1	81.1	80.8	80.8	81.2	81.4	82.0	82.6	83.7	84.6	86.5	88.5	87.8	86.2	85.8	84.3	78.7	79.1	78.5	80.8	81.4	84.7	82.6	89.3	78.0
„ 17,	81.6	81.4	81.1	81.1	80.8	80.4	79.0	78.0	79.5	81.2	80.4	83.5	83.4	85.7	83.2	82.4	83.6	81.8	79.7	80.8	79.9	81.0	80.3	80.1	81.2	86.7	78.0
„ 18,	80.0	80.0	80.2	80.8	80.9	81.0	81.0	81.4	82.1	82.2	82.7	84.0	84.0	84.3	84.8	85.1	83.3	82.5	82.1	81.9	81.9	81.9	81.7	81.5	82.2	85.5	78.7
„ 19,	81.7	81.6	81.6	81.4	81.4	81.4	81.8	81.9	83.0	83.2	82.8	81.5	83.0	83.9	82.2	82.4	82.0	79.3	79.4	75.2	76.3	77.5	77.3	78.1	80.8	83.9	75.2
„ 20,	77.9	77.9	79.0	78.3	78.4	79.1	80.1	80.6	81.3	80.9	79.9	79.8	80.0	73.7	73.1	72.9	73.5	74.1	74.1	74.7	75.1	75.4	75.1	75.2	77.1	82.1	72.9
„ 21,	75.5	75.8	76.2	77.5	78.8	78.7	75.2	74.1	74.8	75.5	75.8	79.1	80.8	81.4	82.1	82.1	81.4	80.8	80.4	80.1	80.1	80.1	79.8	79.5	78.6	83.1	73.9
„ 22,	79.2	79.0	79.1	78.5	78.4	79.1	80.5	81.3	82.3	84.9	85.3	86.1	88.5	90.1	88.5	87.3	84.2	82.3	81.3	80.9	80.2	80.2	80.0	79.8	82.4	91.1	78.3
„ 23,	79.2	79.2	79.0	78.2	78.0	78.2	79.6	81.0	82.9	82.1	83.3	86.1	88.5	88.2	88.8	88.0	86.1	84.1	81.6	80.8	80.5	80.0	80.1	80.0	82.2	89.3	78.0
„ 24,	79.6	79.7	78.8	77.7	78.1	79.0	80.1	81.1	82.2	81.3	81.4	82.8	81.9	78.5	76.3	76.8	76.3	77.9	78.7	79.1	79.1	79.8	79.6	79.4	79.4	83.3	76.2
„ 25,	79.1	78.8	78.4	78.4	78.7	78.9	80.3	81.0	81.5	84.5	83.4	85.6	87.2	86.9	87.4	87.6	85.0	82.9	81.2	80.3	80.0	79.5	79.2	79.1	81.9	89.0	78.3
„ 26,	78.7	78.6	78.1	78.4	78.2	78.2	80.1	82.2	83.8	85.0	85.5	88.7	88.6	87.0	88.0	88.1	86.5	85.0	83.5	81.9	81.0	80.5	79.9	79.7	82.7	89.5	78.1
„ 27,	79.6	79.2	78.6	78.0	78.0	78.2	79.6	81.6	82.4	84.1	84.7	85.4	87.1	90.0	90.4	90.1	87.7	87.4	84.4	83.3	82.9	81.7	81.0	80.5	83.2	90.6	77.9
„ 28,	80.9	80.3	80.4	80.3	79.9	78.0	79.3	80.3	81.8	83.4	84.7	86.4	87.1	86.2	87.6	87.2	85.6	83.5	82.0	81.3	81.0	80.8	80.4	80.2	82.4	89.4	77.8
„ 29,	79.4	79.1	79.1	79.2	79.2	79.1	80.7	81.6	78.1	79.1	81.0	84.7	84.0	86.6	85.3	88.2	87.8	85.2	84.0	83.5	83.1	83.2	83.4	83.2	82.4	88.7	78.1
„ 30,	83.2	83.1	82.5	82.8	82.9	75.0	74.0	75.1	75.9	78.0	80.6	83.0	82.3	83.9	85.7	86.2	86.8	84.1	83.0	82.6	82.2	82.3	82.2	82.5	81.7	88.1	73.9
.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hourly Means,	78.0	77.9	77.8	77.7	77.7	77.6	78.3	79.1	79.9	81.0	81.8	83.0	82.9	83.9	83.9	83.6	82.4	80.8	79.5	78.9	78.7	78.0	78.6	78.5	80.1	86.0	76.2

TABLE III.

TEMPERATURE OF EVAPORATION AND RADIATION, FOR THE MONTH OF JUNE, 1884.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means.	Sun.	Rad.
June 1,.....	70.9	70.6	70.8	70.7	70.6	70.9	71.3	71.9	72.1	71.7	73.2	74.0	75.2	74.5	74.8	74.0	72.6	69.0	69.1	71.0	71.2	71.8	71.6	71.7	71.9	142.6	70.1
" 2,.....	72.0	71.8	71.9	71.7	71.0	71.2	72.8	73.2	74.3	74.1	75.8	77.1	77.0	75.9	76.3	73.2	72.0	71.3	70.8	73.7	73.6	73.0	72.8	72.4	73.3	145.0	69.4
" 3,.....	72.0	71.8	71.7	71.7	71.8	71.3	71.2	72.0	71.5	72.1	72.1	72.0	72.8	73.2	74.0	73.1	72.8	72.7	71.6	71.6	71.4	71.3	71.5	71.7	72.0	147.5	71.1
" 4,.....	70.9	70.5	70.9	70.6	70.6	70.9	71.2	72.0	71.5	71.8	71.9	72.7	73.2	74.3	75.2	73.2	72.9	72.3	72.2	72.7	72.8	72.6	72.6	72.8	72.2	149.6	72.6
" 5,.....	72.4	72.0	72.0	72.2	72.3	72.7	72.4	73.0	73.2	73.1	74.3	74.0	74.5	73.5	74.1	74.2	74.2	73.3	73.0	73.6	74.1	74.3	74.8	74.1	73.4	131.6	73.2
" 6,.....	74.0	74.0	74.2	74.3	74.3	74.0	74.7	75.3	74.8	75.5	76.3	77.1	77.8	78.7	78.0	77.4	76.1	75.4	74.5	74.3	74.0	73.9	73.9	73.8	75.2	149.3	73.4
" 7,.....	73.2	73.0	73.1	72.9	73.3	73.0	73.0	73.1	73.4	74.2	74.4	74.9	74.9	74.9	74.4	74.2	74.3	74.0	73.3	73.2	73.1	73.0	72.9	73.1	73.6	149.7	72.5
" 8,.....	73.1	73.0	72.9	73.0	72.8	72.5	72.5	72.5	73.1	73.8	74.3	74.6	75.3	76.2	76.3	76.0	75.2	73.8	73.2	72.0	72.2	72.1	72.1	72.1	73.5	151.6	72.4
" 9,.....	72.3	72.1	72.0	71.6	71.5	72.0	72.6	73.1	72.9	74.1	75.0	76.0	76.8	76.9	77.0	76.7	75.6	75.0	74.5	74.6	74.6	74.9	74.9	74.8	74.2	146.7	73.1
" 10,.....	74.6	74.7	74.3	74.2	74.2	74.6	75.1	75.5	76.0	77.0	78.0	77.2	77.2	77.4	77.2	77.5	76.9	76.2	75.8	76.1	76.0	76.1	76.1	76.0	76.0	151.7	74.5
" 11,.....	75.9	75.4	75.0	75.0	74.8	74.4	75.6	76.0	76.6	76.8	77.4	78.0	78.8	77.8	77.2	77.3	76.8	76.0	76.0	76.3	76.9	77.1	76.7	76.9	76.4	148.6	75.1
" 12,.....	77.0	75.7	76.3	75.8	75.0	75.7	76.7	75.7	77.1	77.4	78.0	77.2	75.3	75.0	75.0	75.8	75.1	74.6	74.6	74.6	75.3	75.4	75.3	75.3	75.8	125.5	75.0
" 13,.....	75.3	75.6	75.7	76.3	76.8	77.1	77.4	75.9	77.4	77.9	78.4	77.7	77.3	77.5	77.3	77.4	77.3	77.2	77.1	77.3	77.5	77.3	77.1	77.0	77.0	112.3	74.8
" 14,.....	77.3	77.0	76.8	76.8	76.7	77.0	77.3	78.1	78.8	78.3	78.8	78.1	79.4	78.4	78.8	78.7	77.8	77.2	77.1	77.6	77.6	77.4	77.2	76.9	77.7	144.6	76.5
" 15,.....	76.8	76.6	76.8	76.6	76.6	76.6	76.9	77.3	77.6	77.1	77.9	78.2	79.1	79.4	79.9	80.3	79.5	78.1	77.8	77.7	77.8	77.2	77.4	77.2	77.8	151.1	77.4
" 16,.....	77.1	76.9	76.6	76.5	77.0	77.2	77.0	77.6	77.9	77.8	78.0	78.9	79.9	80.2	80.2	79.7	79.8	79.2	75.7	75.6	76.8	78.3	78.3	78.0	77.9	156.3	77.1
" 17,.....	79.2	78.9	78.9	78.8	78.6	77.8	76.9	75.1	75.9	76.9	77.5	77.8	76.8	78.4	77.2	77.8	78.6	77.9	78.4	78.2	76.9	77.6	76.7	76.8	77.7	155.8	76.4
" 18,.....	76.4	78.0	77.9	77.8	78.1	77.8	77.7	77.8	78.5	78.2	77.8	78.9	78.8	79.3	78.7	78.8	78.1	77.9	77.8	77.7	78.0	77.9	77.9	78.1	78.1	126.6	76.6
" 19,.....	77.7	77.5	77.1	77.1	77.5	77.5	77.8	77.9	78.1	78.0	78.0	77.8	78.7	78.9	78.1	78.0	77.7	75.6	76.6	74.0	74.4	74.8	74.7	74.9	77.0	126.2	74.0
" 20,.....	75.1	75.2	75.2	75.6	75.9	76.3	77.0	77.6	77.8	77.6	77.2	77.5	77.9	72.3	72.4	71.1	71.1	72.0	72.6	72.1	72.1	72.0	72.4	73.3	74.6	117.2	72.8
" 21,.....	73.9	74.4	75.4	76.6	77.0	77.1	74.0	73.3	74.1	74.4	75.4	77.7	78.3	77.9	78.1	78.0	77.7	77.3	77.3	77.4	77.3	77.3	77.3	77.1	76.4	128.3	73.0
" 22,.....	76.9	76.8	76.9	76.6	76.4	76.9	77.3	77.3	77.4	78.6	79.3	79.3	80.4	80.9	79.9	79.2	78.3	77.8	77.5	77.1	77.1	76.9	76.7	76.5	77.8	153.4	75.8
" 23,.....	76.3	76.1	76.2	76.0	76.0	76.1	77.1	77.8	78.8	78.2	78.8	80.6	80.9	81.0	80.8	80.4	79.2	78.8	77.7	77.7	77.7	77.6	77.4	77.7	78.1	150.8	75.3
" 24,.....	76.8	77.0	76.2	76.0	76.4	76.9	76.9	77.7	77.7	78.0	77.2	77.2	77.0	77.0	75.7	75.8	75.5	75.6	75.9	76.8	76.8	77.2	77.0	76.5	76.7	147.7	75.4
" 25,.....	76.8	76.5	76.5	76.4	76.6	76.8	77.7	77.9	78.6	78.7	79.3	80.2	81.6	79.9	80.5	80.8	79.5	78.9	78.1	77.7	77.5	77.6	76.9	76.9	78.2	148.2	76.1
" 26,.....	76.8	76.9	76.8	77.0	76.9	76.8	77.8	78.5	79.0	79.6	79.8	80.7	80.1	79.8	79.1	78.8	79.1	78.5	78.4	78.3	77.9	78.0	76.9	76.0	78.2	154.0	75.6
" 27,.....	75.7	74.7	74.7	75.2	75.1	75.6	75.6	76.2	76.7	77.9	78.1	78.2	78.3	78.9	77.9	77.9	76.8	77.2	77.5	76.0	76.0	77.1	76.8	76.9	76.7	151.2	75.0
" 28,.....	77.1	77.6	78.0	77.8	77.7	76.6	76.6	76.7	78.0	78.7	79.1	79.9	80.2	79.7	79.8	78.4	77.6	77.6	76.7	78.0	77.1	77.3	77.1	76.7	77.9	148.6	75.8
" 29,.....	77.0	76.7	76.8	76.5	76.7	77.1	78.0	78.7	76.2	76.8	78.2	79.0	79.1	79.2	79.0	80.6	80.1	80.3	80.1	79.9	80.3	80.2	79.7	79.3	78.6	148.6	76.3
" 30,.....	79.3	79.5	79.7	79.6	79.6	72.7	73.2	74.6	75.0	76.1	77.8	79.3	78.3	79.9	81.6	80.9	81.2	79.7	79.0	78.9	78.9	78.4	79.1	78.7	78.4	137.6	72.8
.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hourly Means, ...	75.3	75.2	75.2	75.2	75.3	75.1	75.4	75.6	76.0	76.3	76.9	77.4	77.7	77.6	77.5	77.2	76.6	76.0	75.7	75.7	75.8	75.9	75.7	75.6	76.1	143.3	74.3

TABLE IV.

AN HOURLY AND DAILY RELATIVE HUMIDITY AND TENSION OF AQUEOUS VAPOUR FOR THE MONTH OF JUNE, 1884.

Hour.	Hourly Mean.		Date.	Daily Mean.	
	Humidity.	Tension.		Humidity.	Tension.
			1884.		
1a.	88	0.844	June 1,.....	76	0.713
2,,	88	0.841	,, 2,.....	77	0.750
3,,	88	0.843	,, 3,.....	77	0.718
4,,	89	0.844	,, 4,.....	75	0.717
5,,	89	0.848	,, 5,.....	87	0.788
6,,	89	0.841	,, 6,.....	88	0.839
7,,	87	0.843	,, 7,.....	81	0.772
8,,	85	0.842	,, 8,.....	79	0.765
9,,	83	0.848	,, 9,.....	80	0.787
10,,	79	0.846	,, 10,.....	83	0.848
11,,	79	0.861	,, 11,.....	88	0.873
Noon.	77	0.868	,, 12,.....	92	0.870
1 p.	75	0.869	,, 13,.....	88	0.892
2,,	74	0.864	,, 14,.....	81	0.890
3,,	74	0.859	,, 15,.....	77	0.880
4,,	73	0.850	,, 16,.....	80	0.893
5,,	76	0.841	,, 17,.....	85	0.904
6,,	79	0.836	,, 18,.....	83	0.908
7,,	83	0.842	,, 19,.....	84	0.878
8,,	86	0.848	,, 20,.....	89	0.825
9,,	87	0.855	,, 21,.....	90	0.881
10,,	87	0.858	,, 22,.....	81	0.892
11,,	87	0.852	,, 23,.....	83	0.908
Midt.	87	0.849	,, 24,.....	88	0.883
			,, 25,.....	84	0.916
			,, 26,.....	81	0.906
			,, 27,.....	73	0.832
			,, 28,.....	81	0.896
			,, 29,.....	84	0.928
			,, 30,.....	86	0.929
			.....	...	...
Mean, ...	83	0.850	Mean,.....	83	0.849

TABLE V.

DURATION OF SUNSHINE.

Date.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	Sums.
1884.														
1,.....	...	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.2	11.2
2,.....	0.2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.2	11.4
3,.....	...	0.4	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.3	10.7
4,.....	...	...	0.3	0.1	0.2	0.9	0.8	1.0	0.6	0.6	...	...	...	4.5
5,.....	...	...	...	...	...	...	...	...	...	...	...	...	...	0.0
6,.....	...	...	0.3	...	...	...	...	0.3	1.0	1.0	1.0	1.0	0.3	4.9
7,.....	...	...	0.5	0.9	0.2	0.3	0.1	...	...	...	0.6	1.0	0.3	3.9
8,.....	...	...	...	0.3	0.8	0.6	0.3	1.0	1.0	1.0	1.0	1.0	0.2	7.2
9,.....	...	...	...	...	0.9	1.0	1.0	1.0	1.0	1.0	0.5	0.1	...	6.5
10,.....	...	...	...	...	...	0.8	0.1	...	...	...	...	...	...	0.9
11,.....	...	0.4	0.6	0.7	0.2	0.5	0.6	0.6	0.1	...	...	...	...	3.7
12,.....	...	...	...	...	...	...	...	...	...	...	...	...	...	0.0
13,.....	...	...	...	...	...	...	...	...	...	...	...	...	...	0.0
14,.....	...	...	...	0.2	0.6	0.6	0.1	0.9	0.1	...	...	...	...	2.5
15,.....	...	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	11.4
16,.....	...	...	...	0.2	0.4	1.0	0.4	0.9	1.0	0.9	0.4	0.5	...	5.7
17,.....	...	...	...	...	...	0.1	0.2	0.3	0.5	0.3	...	0.1	...	1.5
18,.....	...	...	...	...	...	...	...	...	0.9	0.6	0.7	...	...	2.2
19,.....	...	...	...	0.3	...	...	...	...	...	...	...	...	...	0.3
20,.....	...	...	...	...	...	...	...	...	...	...	...	...	...	0.0
21,.....	...	...	...	...	...	...	...	...	...	...	...	...	...	0.0
22,.....	0.1	0.3	0.6	0.9	1.0	1.0	1.0	1.0	1.0	0.8	0.4	...	...	8.1
23,.....	0.4	0.9	1.0	0.9	0.2	0.8	1.0	1.0	1.0	1.0	1.0	1.0	0.5	10.7
24,.....	...	0.1	1.0	0.4	...	...	...	...	...	...	...	...	...	1.5
25,.....	0.3	1.0	0.4	0.8	1.0	0.9	1.0	1.0	1.0	1.0	0.9	...	...	9.3
26,.....	0.2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.4	11.6
27,.....	0.4	1.0	0.9	0.8	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.4	11.4
28,.....	...	...	0.1	0.9	0.7	...	0.4	...	...	0.6	0.2	0.1	...	3.0
29,.....	...	...	...	...	...	...	...	0.4	0.8	0.7	0.8	0.9	...	3.6
30,.....	...	...	...	...	...	...	...	...	...	0.5	0.7	0.3	...	1.5
.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sums,.....	1.6	8.0	10.7	12.4	12.1	14.5	13.0	15.4	16.0	16.0	14.2	12.0	3.3	149.2
Means,	...	...	...	...	...	...	...	...	...	...	...	...	...	...

TABLE VI.

RAINFALL FOR THE MONTH OF JUNE, 1884.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midr.	Sums.
June 1,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 2,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 3,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 4,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 5,	...	...	...	...	...	...	...	...	0·010	0·005	...	...	...	0·515	0·020	...	...	...	...	...	...	...	0·005	0·020	0·575
„ 6,	...	...	...	...	0·110	..	...	...	0·010	0·010	...	...	...	...	...	...	...	...	...	...	...	...	...	0·040	0·170
„ 7,	0·005	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·005
„ 8,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 9,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 10,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·010	0·010	0·020
„ 11,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·020	0·055	0·020	0·035	0·050	0·020	0·060	0·035	0·025	0·320
„ 12,	0·080	...	0·200	0·115	...	...	...	0·005	0·020	0·030	0·020	0·060	0·250	0·060	0·010	0·010	0·015	0·005	...	...	...	...	...	...	0·880
„ 13,	...	...	...	0·025	...	...	0·075	0·670	0·040	...	0·005	0·005	...	...	...	...	...	...	...	...	...	...	...	...	0·820
„ 14,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 15,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 16,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 17,	...	...	...	...	...	...	0·045	0·010	...	0·005	...	...	...	...	...	...	...	...	0·085	0·010	0·010	...	...	...	0·105
„ 18,	0·020	0·265	0·015	...	...	...	0·025	0·005	...	...	...	0·005	0·005	...	...	...	...	0·200	0·685	0·015	...	...	...	...	0·960
„ 19,	...	...	...	...	...	...	...	...	...	...	...	0·145	...	...	...	...	0·055	...	...	0·270	0·095	0·005	...	...	0·570
„ 20,	0·005	0·005	...	...	...	...	...	...	...	0·015	0·140	0·100	0·100	0·050	0·275	0·035	0·020	...	...	...	...	...	...	0·005	1·350
„ 21,	...	...	0·010	0·095	0·005	0·045	0·095	0·015	0·030	0·150	0·070	...	...	...	...	...	...	...	...	...	...	...	...	...	0·515
„ 22,	...	...	0·005	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·005
„ 23,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·030	...	...	...	0·030
„ 24,	...	...	...	0·010	...	...	0·005	...	0·005	0·010	...	...	...	0·290	0·700	0·050	...	...	...	...	...	...	...	...	1·070
„ 25,	0·035	...	...	0·125	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·160
„ 26,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 27,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 28,	...	...	...	...	0·200	0·070	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·270
„ 29,	...	...	...	...	...	...	...	0·235	0·045	0·005	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·285
„ 30,	...	0·010	...	...	...	2·030	0·545	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2·585
.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sums,	0·145	0·280	0·230	0·370	0·315	2·145	0·790	0·940	0·160	0·230	0·235	0·315	0·355	1·515	1·005	0·115	0·145	0·225	0·805	0·345	0·155	0·065	0·050	0·100	11·035

TABLE VII.

DIRECTION AND VELOCITY OF THE WIND, FOR THE MONTH OF JUNE, 1884.

DATE.	1 a.		2 a.		3 a.		4 a.		5 a.		6 a.		7 a.		8 a.		9 a.		10 a.		11 a.		Noon.		1 p.		2 p.		3 p.		4 p.		5 p.		6 p.		7 p.		8 p.		9 p.		10 p.		11 p.		Midt.		Sums.	Means.
	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.		
June 1,	9	6	10	7	9	8	9	9	8	9	7	7	6	11	7	16	8	19	9	18	11	19	9	19	9	19	9	24	8	18	8	18	9	18	9	17	8	17	9	13	9	11	9	10	8	6	10	6	326	13.6
" 2,	8	5	8	3	8	4	10	2	...	0	...	0	...	1	...	1	10	3	10	4	11	9	9	13	8	17	8	18	8	15	8	18	8	17	8	14	7	23	7	21	7	10	7	10	7	21	8	20	326	21.9
" 3,	9	9	7	6	6	8	7	7	7	14	7	18	7	21	7	26	7	27	7	30	7	37	7	38	8	38	8	31	8	30	8	25	7	29	7	28	7	23	7	22	7	21	7	19	7	21	7	16	124	20.9
" 4,	7	21	7	20	7	15	7	21	7	19	7	23	6	20	4	20	7	20	8	24	7	25	8	26	8	24	9	22	8	23	8	23	8	23	8	20	8	23	8	23	8	20	9	18	9	17	11	16	8	14	424	17.7
" 5,	7	17	7	17	7	17	7	17	7	15	7	13	7	14	8	16	8	18	8	22	7	20	7	18	7	16	8	19	9	17	9	20	9	20	9	20	9	20	9	20	9	20	7	21	7	20	7	19	7	20	419	17.5
" 6,	8	10	7	10	8	9	8	10	8	12	8	18	8	14	9	19	8	19	8	18	8	19	8	20	8	20	9	20	8	23	8	24	9	20	8	24	7	24	7	25	8	21	7	26	7	23	8	18	555	23.1
" 7,	7	17	6	16	6	19	7	17	4	16	6	17	5	20	4	22	6	23	7	23	7	30	7	29	7	30	7	27	7	30	7	30	8	24	7	24	7	25	8	21	7	26	7	23	8	18	468	19.5
" 8,	7	21	7	20	7	19	7	19	6	18	7	18	7	18	6	18	8	19	8	23	7	22	8	21	7	21	8	21	8	20	9	23	9	19	9	22	10	22	8	22	8	18	7	13	6	13	7	15	397	16.5
" 9,	7	18	7	18	7	20	7	20	7	18	8	14	7	16	6	17	7	16	7	17	11	23	10	20	11	20	11	20	10	20	9	17	9	15	10	18	9	12	9	15	9	9	7	10	7	10	8	14	322	13.4
" 10,	7	10	7	10	8	12	9	13	8	15	8	14	9	9	8	10	8	11	8	9	9	13	9	18	8	18	8	16	9	16	9	14	9	17	9	20	9	17	10	12	9	13	10	12	10	13	9	11	509	21.2
" 11,	8	13	8	17	7	13	8	17	7	16	7	7	7	16	8	20	8	20	8	23	7	24	7	19	9	26	8	26	8	30	9	28	10	30	10	25	9	20	12	14	11	20	9	25	10	22			172	7.2
" 12,	10	16	9	10	7	6	8	6	4	4	5	2	10	5	11	8	5	6	6	10	15	12	15	16	16	14	24	8	20	5	27	6	27	3	27	2	...	1	32	4	7	9	7	8			271	11.3
" 13,	6	6	8	6	7	4	14	8	17	10	16	9	15	13	18	9	16	12	15	16	16	19	17	15	17	17	18	13	17	20	18	20	18	17	17	14	17	7	17	4	16	6	16	7	12	6	16	10	290	11.1
" 14,	16	9	17	15	17	16	18	14	18	14	18	13	17	11	17	11	16	10	16	12	18	12	18	15	18	14	17	17	17	17	18	14	19	18	19	12	18	18	18	18	18	15	17	16	18	18	19	88	365	15.2
" 15,	18	12	19	13	19	17	20	14	20	18	19	19	19	16	19	14	19	16	19	14	20	14	21	15	19	18	19	19	19	12	18	14	19	18	19	12	18	18	18	18	18	15	17	16	18	18	19	14	421	18.0
" 16,	19	19	20	24	21	24	20	26	19	24	21	22	19	24	20	22	21	20	21	24	20	25	19	25	19	21	18	19	17	19	18	18	18	9	25	7	26	5	20	3	18	8	18	12	12	14			368	15.3
" 17,	18	16	18	20	19	27	20	23	21	22	22	19	26	15	22	12	22	18	20	18	22	19	20	22	22	17	18	14	12	15	23	7	19	10	20	8	20	16	19	22	20	11	20	15	20	5	19	2	573	23.9
" 18,	20	6	18	23	18	26	17	20	17	25	18	26	18	29	18	33	18	25	18	26	18	30	18	27	17	30	18	26	18	31	18	27	18	24	18	28	18	24	17	18	18	16	18	19	18	18	18	22	545	22.7
" 19,	18	25	18	23	18	21	18	26	18	19	17	24	17	19	16	24	16	27	17	25	16	28	17	29	16	28	16	23	16	27	17	23	18	30	21	23	23	16	24	28	20	23	19	14	17	11	17	9	364	15.2
" 20,	16	6	16	10	18	14	17	12	16	9	15	6	14	18	14	20	15	32	16	30	15	25	16	25	16	25	16	27	21	27	11	26	8	21	3	18	4	8	8	18	19	16	8	20	8	18			352	14.7
" 21,	8	20	8	19	7	13	15	17	16	19	16	13	26	19	28	10	...	1	25	4	29	3	7	6	10	11	14	20	14	23	14	25	15	22	14	20	15	18	15	15	14	16	15	11	14	15	14	12	310	12.9
" 22,	15	11	15	9	14	10	12	5	12	10	13	10	14	12	14	12	15	18	15	17	15	19	15	17	15	15	15	14	16	12	15	13	14	13	15	13	14	10	12	11	12	12	12	12	13	13	11		369	15.4
" 23,	13	9	13	11	14	10	13	3	11	3	8	6	7	9	8	12	8	16	8	18	8	20	8	23	8	21	8	21	9	24	9	23	9	20	9	22	8	22	9	19	10	17	10	14	10	11	9	15	354	14.9
" 24,	8	15	12	13	9	17	6	8	4	6	9	7	8	15	6	15	5	16	4	18	5	12	32	15	31	16	24	26	28	27	23	24	21	23	21	8	18	13	15	10	7	6	12	10	14	11	14	11	448	18.9
" 25,	13	9	13	10	10	5	9	4	8	4	8	6	8	6	8	10	9	11	12	14	8	19	8	17	10	16	8	16	10	14	8	16	8	14	8	13	8	12	9	12	9	10	9	9	9	9	5	4	258	10.7
" 26,	9	6	9	6	8	6	8	4	8	2	8	5	8	8	9	9	10	10	10	13	11	9	18	6	25	10	25	9	25	8	25	6	26	2	26	2	3	4	7	4	...	1	8	4	9	6			144	6.0
" 27,	9	3	24	:	19	3	...	1	...	1	...	1	19	2	19	8	22	6	24	8	24	9	24	12	24	12	24	10	24	8	24	10	24	9	21	5	...	1	...	1	16	2	10	6	10	8	10	4	128	5.3
" 28,	8	5	7	2	9	8	8	8	11	5	13	14	12	12	9	17	8	15	7	18	8	16	8	13	8	13	12	10	14	7	15	9	24	3	...	1	31	2	...	0	12	4	11	8	9	2	9	2	189	7.9
" 29,	...	9	1	...	1	...	1	6	5	4	6	6	6	6	4	12	9	15	5	13	5	8	5	10	4	10	4	24	7	27	9	20	7	21	5	18	9	18	2	22	3	10	4	17	5	17	16	18	18	14	141	5.9
" 30,	19	25	18	20	18	20	18	24	20	30	24	21	24	4	...	1	...	0	19	2	9	4	7	5	8	11	8	8	14	7	15	6	18	10	18	12	19	13	18	11	18	11	20	10	19	20	20	20	295	12.3
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sums,	...	366	...	382	...	388	...	380	...	379	...	384	...	385	...	437	...	452	...	489	...	545	...	566	...	554	...	541	...	533	...	521	...	501	...	462	...	418	...	393	...	359	...	370	...	397	...	373	10,553	439.8
Hourly Means,	...	12.2	...	12.7	...	12.9	...	12.7	...	12.6	...	12.8	...	12.8	...	14.6	...	15.1	...	16.3	...	18.2	...	18.7	...	18.5	...	18.0	...	17.8	...	17.4	...	16.7	...	15.4	...	13.9	...	13.1	...	11.9	...	12.3	...	12.2	...	12.4	351.8	14.7

TABLE VIII.

MEAN HOURLY COMPONENTS AND MEAN DIRECTION OF THE WIND, FOR JUNE, 1

Hour.	Components (miles per hour).						Dir
	N	S	E	W	+N-S	+E-W	
1 a.	0.1	4.2	7.6	1.8	— 4.2	+ 5.8	E
2 „	0.2	5.3	6.7	2.0	— 5.1	+ 4.7	E
3 „	0.5	5.0	6.7	2.6	— 4.6	+ 4.1	E
4 „	0.2	5.4	6.4	2.2	— 5.2	+ 4.2	E
5 „	1.0	5.5	5.8	2.5	— 4.6	+ 3.4	E
6 „	0.3	4.7	6.5	2.7	— 4.4	+ 3.9	E
7 „	1.3	4.1	6.8	2.4	— 2.8	+ 4.4	E
8 „	1.6	4.9	8.4	1.9	— 3.3	+ 6.5	E
9 „	0.8	4.7	8.9	1.7	— 4.0	+ 7.2	E
10 „	0.4	6.1	9.3	2.1	— 5.7	+ 7.2	E
11 „	0.4	7.3	10.1	2.3	— 6.9	+ 7.8	E
Noon.	0.5	6.7	10.5	2.4	— 6.2	+ 8.1	E
1 p.	0.5	6.8	10.3	2.0	— 6.3	+ 8.3	E
2 „	0.5	5.5	10.0	3.6	— 5.0	+ 6.4	E
3 „	0.6	5.6	10.3	3.5	— 5.0	+ 6.8	E
4 „	0.3	5.1	9.7	3.5	— 4.8	+ 6.2	E
5 „	0.3	5.1	9.0	3.6	— 4.8	+ 5.4	E
6 „	0.2	5.4	9.0	2.2	— 5.2	+ 6.8	E
7 „	0.2	4.5	8.2	2.3	— 4.3	+ 5.9	E
8 „	0.2	3.4	8.2	2.1	— 3.2	+ 6.1	E
9 „	0.0	3.8	7.9	1.4	— 3.8	+ 6.5	E
10 „	0.1	5.0	7.7	1.2	— 4.8	+ 6.4	E
11 „	0.2	5.1	8.4	1.2	— 4.9	+ 7.2	E
Midt.	0.0	4.6	7.7	1.7	— 4.6	+ 6.0	E
Mean,.....	0.43	5.16	8.34	2.29	— 4.71	+ 6.05	E

TABLE IX.

DIRECTION AND FORCE OF THE WIND, AT VICTORIA PEAK, AND SEA DISTURBANC

Date.	4 a.			10 a.			4 p.			10 p.	
	Direction	Force.	Sea.	Direction	Force.	Sea.	Direction	Force.	Sea.	Direction	Force
1884.											
June 1,.....	...	...	3	E	3	3	E	3	2	E	4
„ 2,.....	...	...	2	ESE	3	2	ESE	3	0	SE	3
„ 3,.....	...	...	2	E	5	4	E	4	5	E	5
„ 4,.....	...	...	5	E	5	5	E	5	4	E	4
„ 5,.....	...	...	4	E	3	4	E	3	4	E	3
„ 6,.....	...	...	3	SE	3	3	E	4	3	E	4
„ 7,.....	...	...	5	E	5	5	E	5	5	E	6
„ 8,.....	...	...	5	E	4	5	E	5	5	E	4
„ 9,.....	...	...	4	E	4	4	E	4	4	E	4
„ 10,.....	...	...	4	SE	3	4	SE	2	4	SE	3
„ 11,.....	...	...	3	E	5	3	E	5	4	SE	5
„ 12,.....	...	...	2	SSW	4	2	SSW	4	1	S	2
„ 13,.....	...	...	2	S	4	2	S	5	2	S	5
„ 14,.....	...	...	2	S	4	2	S	4	2	S	4
„ 15,.....	...	...	2	S	4	2	S	4	3	S	6
„ 16,.....	...	...	3	S	5	3	SW	5	3	SW	5
„ 17,.....	...	...	3	SSW	5	3	SSW	4	3	S	6
„ 18,.....	...	...	4	S	6	4	S	5	4	S	6
„ 19,.....	...	...	4	S	6	4	S	6	4	S	5
„ 20,.....	...	...	3	S	6	3	WNW	4	3	SE	4
„ 21,.....	...	...	0	SW	4	0	S	5	1	S	4
„ 22,.....	...	...	1	S	5	1	S	4	1	S	4
„ 23,.....	...	...	0	S	3	2	E	4	2	E	4
„ 24,.....	...	...	3	ESE	4	3	W	5	4	SW	4
„ 25,.....	...	...	0	S	4	2	S	4	2	S	3
„ 26,.....	...	...	0	E	2	2	SW	2	2	E	1
„ 27,.....	...	...	1	E	1	0	SW	2	0	SE	1
„ 28,.....	...	...	1	ESE	2	1	SW	3	1	SW	3
„ 29,.....	...	...	0	S	4	0	S	3	1	S	4
„ 30,.....	...	...	0	SW	4	0	SW	4	0	S	5
.....	...	...	...	...	...	...	...	...	...	...	...
Mean,.....	...	...	2.4	E 29° S	4.0	2.6	E 22° S	4.0	2.6	E 30° S	4.0

TABLE X.

AMOUNT AND CLASSIFICATION OF CLOUDS AND DIRECTION WHENCE COMING.

	4 a.			10 a.			4 p.			10 p.		
TE.	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction
884.												
1, ...	1	cum.	...	1	sm-cum.	ENE	1	c-cum.	WNW	2	sm-cum.	SE
2, ...	1	cum.	...	1	c-cum.	WSW	2	c-cum.	...	0	...	...
3, ...	0	...	...	5	c-cum. / cum.	W / E	4	c. / cum.	W / E	4	c-cum. / cum.	WSW / E
4, ...	10	cum.	E	9	sm-cum. / cum.	SW / E	9	sm-cum. / cum.	WSW / NE	8	sm-cum. / cum.	WSW / E
5, ...	6	cum.	E	10	nim.	E	10	cum-str. / cum-nim.	E	10	cum.	E
6, ...	10	nim.	E	10	cum-str. / cum-nim.	E	5	c-cum. / cum.	W / ESE	10	nim.	E
7, ...	8	cum.	E	8	R-cum.	E	3	c-cum. / cum.	W / E	8	cum.	E
8, ...	10	nim.	SE	9	R-cum.	E	4	c-cum. / cum.	NW / E	3	sm-cum.	E
9, ...	6	sm-cum.	E	5	c-str. / cum.	E	9	R-cum.	E	10	cum.	E
10, ...	6	c-cum. / cum.	E	8	cum-str. / cum.	ESE	10	cum-str. / cum.	ESE	10	sm-cum. / cum-nim.	SSW / E
11, ...	8	sm-cum.	S	10	nim.	E	10	nim.	E	10	nim.	E
12, ...	8	nim.	S	10	cum-nim.	SSE	10	nim.	SW	10	cum-nim.	SW
13, ...	10	cum-nim.	SW	10	cum-str. / cum-nim.	SW	10	cum-str. / cum-nim.	SW / SW	7	cum-str. / cum-nim.	SW
14, ...	4	cum.	SW	7	cum.	SW	10	cum-str. / R-cum.	SW	6	cum.	SW
15, ...	6	c-cum. / cum.	SW	3	c-cum. / cum.	W / WSW	4	c-str. / cum.	W / SW	7	cum.	SW
16, ...	4	cum.	SW	8	c-cum. / R-cum.	NE / SW	8	c-cum. / cum.	NNE / SW	10	cum-nim.	SW
17, ...	8	cum.	SW	10	nim.	SW	10	c-cum. / R-cum.	W / SW	10	cum-nim.	SW
18, ...	10	nim.	SW	10	R-cum.	SW	9	cum. / cum-nim.	SW / SW	10	cum-str. / cum-nim.	SW
19, ...	10	cum-nim.	SW	10	cum-nim.	SW	10	cum-nim.	SW	10	nim.	SW
20, ...	10	nim.	SSW	10	nim.	S	10	nim.	SSW	10	cum-nim.	SSE
21, ...	10	nim.	...	10	nim.	WSW	9	cum.	S	9	cum-nim.	SSW
22, ...	2	c-cum.	S	7	c-cum. / cum.	S	7	c-cum. / cum.	NNW / SSE	5	cum.	SSE
23, ...	3	cum.	SSE	8	cum.	SE	5	cum.	ESE	7	cum.	ESE
24, ...	6	cum.	E	10	nim.	NE	10	nim.	NW	7	cum-nim.	SE
25, ...	5	cum-str.	SE	4	c-cum. / cum.	NE / SE	8	c-cum. / cum.	NKE / ESE	1	sm-cum.	ESE
26, ...	0	...	...	6	c. / cum.	NNE / ESE	4	c-cum. / cum.	NE / E	4	cum.	E
27, ...	1	cum-str.	NE	4	sm-cum.	ENE	1	c. / cum.	NE / ENE	5	cum.	NE
28, ...	10	nim.	E	6	c-cum. / cum.	NE / WSW	7	c-cum. / cum-str.	NNE / NE	9	cum.	NE
29, ...	6	cum.	WNW	10	nim.	SSW	7	sm-cum. / cum-str.	WSW / S	10	cum-nim.	WSW
30, ...	10	nim.	SW	10	cum-str.	SW	9	c-cum. / cum.	SW	10	sm-cum. / cum.	WSW / SW
...	...	...	...	...	...	...	...	...	...	...	...	...
ed line, phoon a approa	6.3	...	...	7.6	...	...	7.2	...	...	7.4	...	...

TABLE XI.

VICTORIA PEAK.

Date.	Barometer.			Temperature.					
	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.	Sun.	Max.	Min.
1884.	ins.	ins.	ins.	°	°	°	°	°	°
June 1,.....	28.010	27.963	28.026	69.8	72.8	69.8	133.0	73.9	66.0
„ 2.....	28.032	27.991	28.001	73.8	76.6	71.2	135.0	76.9	65.0
„ 3,.....	28.042	28.015	28.002	67.8	72.0	67.8	137.0	72.1	65.4
„ 4,.....	28.041	28.004	28.013	69.0	69.8	67.6	127.0	70.9	65.4
„ 5,.....	28.024	27.961	27.971	68.8	69.4	69.8	94.0	71.9	66.0
„ 6,.....	27.995	27.950	27.977	70.8	72.8	69.8	119.0	72.9	69.0
„ 7,.....	27.983	27.937	27.981	69.8	69.8	68.8	117.0	70.9	67.0
„ 8,.....	28.045	27.930	27.931	68.0	69.8	68.8	121.0	71.1	66.0
„ 9,.....	27.942	27.908	27.949	69.8	71.8	69.8	132.0	72.3	68.0
„ 10,.....	27.937	27.891	27.919	71.8	73.0	72.2	131.0	73.9	70.0
„ 11,.....	27.951	27.928	28.003	71.8	72.8	71.8	112.2	72.9	71.0
„ 12,.....	28.003	27.977	27.998	72.6	71.8	71.8	102.0	72.9	70.0
„ 13,.....	28.001	27.963	28.006	73.2	73.6	73.6	105.0	73.9	71.0
„ 14,.....	28.030	28.012	28.036	73.4	72.8	73.8	126.4	73.9	72.0
„ 15,.....	28.034	28.004	28.004	73.8	74.8	73.8	129.0	75.1	72.8
„ 16,.....	28.002	27.951	27.972	73.8	74.8	74.8	128.0	76.3	72.0
„ 17, ...	28.000	27.953	27.911	72.8	72.8	73.8	137.0	74.9	71.0
„ 18,.....	27.973	27.963	27.959	72.8	72.8	73.8	95.0	74.9	71.0
„ 19,.....	28.006	27.980	27.998	74.8	75.0	73.8	96.0	75.7	71.0
„ 20,.....	28.044	28.027	28.071	73.8	70.8	71.0	85.0	75.3	70.2
„ 21,.....	28.030	28.042	28.042	72.8	73.6	73.8	119.0	73.9	71.0
„ 22,.....	28.016	27.982	27.972	73.8	73.8	73.8	135.0	75.9	72.0
„ 23,.....	27.984	27.918	27.949	74.8	74.8	73.6	142.0	75.9	72.0
„ 24,.....	27.922	27.977	27.972	73.8	73.6	72.6	116.0	73.9	72.0
„ 25,.....	28.015	27.996	27.996	73.8	73.8	72.8	136.0	75.7	71.0
„ 26,.....	27.974	27.913	27.911	76.8	76.8	74.2	142.8	78.9	71.0
„ 27,.....	27.887	27.812	27.822	77.2	78.8	75.8	141.2	79.7	73.0
„ 28,.....	27.816	27.791	27.795	75.2	74.6	73.8	137.0	75.9	69.0
„ 29,.....	27.839	27.793	27.785	72.6	75.0	74.4	128.0	76.9	71.0
„ 30,.....	27.886	27.885	27.897	74.0	75.0	74.8	115.0	76.9	72.0
.....	...	...	...	...	...	...	...	...	...
Mean,.....	27.982	27.948	27.962	72.6	73.3	72.2	122.5	74.5	69.8

TABLE XII.

TEMPERATURE.

Date.	Cape d'Aguilar.					
	4 a.	10 a.	4 p.	10 p.	Max.	M
1884.	°	°	°	°	°	
June 1	73.3	76.0	76.6	73.4	76.8	
„ 2,.....	73.2	77.5	78.8	74.6	80.8	
„ 3,.....	74.6	76.4	74.8	74.6	76.8	
„ 4,.....	74.1	76.1	76.4	75.6	76.8	
„ 5,.....	74.6	74.6	74.5	75.1	76.7	
„ 6,.....	75.0	75.8	75.6	74.9	77.3	
„ 7,.....	74.1	76.6	76.1	76.3	76.8	
„ 8,.....	74.6	74.8	76.1	75.6	76.8	
„ 9,.....	74.6	76.6	76.3	76.6	77.6	
„ 10,.....	76.1	77.8	78.0	77.1	78.8	
„ 11,.....	76.6	77·4	77.8	76.9	80.3	
„ 12,.....	76.6	80.1	75.8	75.6	80.1	
„ 13, ...	76.6	79.8	80.1	77.7	80.1	
„ 14,.....	79.4	82.6	81.6	78.6	84.2	
„ 15,.....	77.6	84.0	83.2	80.4	85.0	
„ 16,.....	79.6	81.6	82.2	81.8	84.8	
„ 17,.....	80.1	76.6	79.6	79.7	81.8	
„ 18,.....	80.3	82.4	81.6	81.4	82.8	
„ 19,.....	80.8	82.1	81.9	81.6	82.8	
„ 20,.....	79.1	80.6	74.6	75.6	80.8	
„ 21,.....	78.6	76.6	81.6	79.8	81.6	
„ 22,.....	78.6	81.8	81.9	79.4	84.8	
„ 23,.....	79.1	84.8	80.6	79.8	86.6	
„ 24,.....	77.6	81.6	77.6	79.6	81.8	
„ 25,.....	79.4	84.5	85.1	79.6	85.8	
„ 26,.....	78.6	82.5	85.6	79.8	87.8	
„ 27,.....	78.6	86.6	86.5	80.4	87.8	
„ 28,.....	79.6	80.9	82.6	79.7	84.8	5
„ 29,.....	79.6	76.6	82.6	81.6	83.4	
„ 30,.....	81.3	77.6	82.6	80.6	82.8	
.....	...	...	...	...	...	
Mean, ...	77.4	79.3	79.6	78.1	81.5	

TABLE XIII.

RELATIVE HUMIDITY.

Date.	Observatory.			Cape d'Aguilar.				Victoria Peak.		
	10 a.	4 p.	10 p.	4 a.	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.
1884.										
1,.....	72	60	88	91	82	79	95	85	81	93
2,.....	71	52	88	94	84	83	92	81	78	90
3,.....	73	67	81	92	81	87	87	96	84	95
4,.....	73	69	83	90	82	82	92	95	90	95
5,.....	84	86	91	92	92	93	100	99	98	99
6,.....	90	77	92	100	91	95	97	99	99	99
7,.....	74	72	85	98	88	93	90	93	95	99
8,.....	76	69	84	97	89	88	88	99	90	99
9,.....	76	74	86	92	88	92	95	98	96	99
10,.....	74	73	91	93	90	91	95	95	94	98
11,.....	83	88	95	97	95	97	97	99	99	99
12,.....	89	94	95	97	91	100	97	99	99	98
13,.....	87	83	89	95	93	92	94	98	99	95
14,.....	79	75	88	89	85	91	90	98	99	99
15,.....	73	64	81	97	86	86	89	95	95	99
16,.....	80	74	89	93	93	90	92	99	99	99
17,.....	82	81	85	98	100	91	99	99	99	99
18,.....	83	75	83	94	88	93	89	99	99	99
19,.....	78	81	88	96	91	89	89	99	99	99
20,.....	86	91	84	94	93	97	88	99	99	95
21,.....	95	83	88	95	97	89	92	99	99	99
22,.....	75	69	86	97	88	89	91	99	95	99
23,.....	83	71	89	91	88	93	92	87	95	95
24,.....	86	95	89	93	90	98	90	99	99	99
25,.....	76	73	91	90	84	79	91	98	95	96
26,.....	78	65	89	95	87	79	88	95	91	93
27,.....	75	56	81	89	83	78	87	85	81	82
28,.....	80	66	85	91	85	87	88	93	81	81
29,.....	90	71	87	93	99	89	93	98	91	94
30,.....	91	79	83	96	97	93	97	94	98	95
.....	...	...	...	...	...	...	...	...	...	...
Mean,.....	80	74	87	94	89	89	92	96	94	95

TABLE XIV.

TENSION OF AQUEOUS VAPOUR EXPRESSED IN INCHES OF MERCURY.

Date.	Observatory.			Victoria Peak.		
	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.
1884.						
1,.....	0.692	0.706	0.748	0.618	0.652	0.682
2,.....	0.750	0.647	0.779	0.676	0.710	0.693
3,.....	0.706	0.708	0.713	0.656	0.662	0.643
4,.....	0.697	0.722	0.752	0.671	0.653	0.638
5,.....	0.768	0.808	0.824	0.702	0.709	0.726
6,.....	0.854	0.866	0.815	0.751	0.804	0.726
7,.....	0.766	0.758	0.770	0.682	0.690	0.702
8,.....	0.761	0.798	0.732	0.683	0.653	0.702
9,.....	0.770	0.835	0.827	0.719	0.754	0.726
10,.....	0.844	0.856	0.875	0.746	0.762	0.772
11,.....	0.868	0.901	0.920	0.777	0.804	0.777
12,.....	0.906	0.876	0.867	0.798	0.777	0.770
13,.....	0.916	0.887	0.905	0.807	0.826	0.794
14,.....	0.904	0.897	0.905	0.804	0.804	0.832
15,.....	0.844	0.903	0.873	0.792	0.819	0.832
16,.....	0.890	0.927	0.937	0.832	0.860	0.860
17,.....	0.868	0.891	0.902	0.804	0.804	0.832
18,.....	0.912	0.901	0.903	0.804	0.804	0.832
19,.....	0.890	0.900	0.829	0.860	0.866	0.832
20,.....	0.904	0.739	0.740	0.832	0.751	0.726
21,.....	0.838	0.905	0.901	0.804	0.826	0.832
22,.....	0.894	0.890	0.882	0.832	0.792	0.832
23,.....	0.913	0.937	0.915	0.755	0.819	0.786
24,.....	0.916	0.880	0.900	0.824	0.826	0.798
25,.....	0.904	0.961	0.922	0.815	0.792	0.780
26,.....	0.939	0.861	0.927	0.876	0.835	0.786
27,.....	0.873	0.792	0.870	0.805	0.801	0.727
ued fine, th.....	0.919	0.854	0.891	0.812	0.696	0.676
bloon appe.....	0.892	0.943	0.992	0.783	0.792	0.800
approache	0.876	0.985	0.920	0.789	0.849	0.819
	...	...	...	...	...	...
..	0.849	0.851	0.858	0.770	0.773	0.759

TABLE XV.

RAINFALL AT DIFFERENT STATIONS.

Date.	Observatory.		Stone Cutters' Island.	Victoria Peak
	Amount.	Duration.	Amount.	Amount.
1884.	ins.	hrs.	ins.	ins.
June 1,.....	...	0	...	...
„ 2,.....	...	0	...	...
„ 3,.....	...	0	...	...
„ 4,.....	0.015	1	...	...
„ 5,.....	0.690	5	0.32	0.60
„ 6,.....	0.045	2	...	0.16
„ 7,.....	...	0	...	0.20
„ 8,.....	...	0	...	...
„ 9,.....	...	0	...	...
„ 10,.....	0.020	2	...	...
„ 11,.....	0.770	11	0.75	0.75
„ 12,.....	1.240	10	0.52	0.65
„ 13,.....	0.010	2	...	...
„ 14,.....	...	0	...	...
„ 15,.....	...	0	...	...
„ 16,.....	0.165	3	0.32	0.26
„ 17,.....	1.230	4	0.87	0.70
„ 18,.....	0.010	1	0.03	0.10
„ 19,.....	0.585	7	0.92	0.45
„ 20,.....	1.640	13	3.12	1.96
„ 21,.....	0.215	2	0.91	0.43
„ 22,.....	...	0	...	...
„ 23,.....	0.060	2	0.10	0.12
„ 24,.....	1.200	5	0.94	1.32
„ 25,.....	...	0	...	...
„ 26,.....	...	0	...	...
„ 27,.....	0.270	2	0.05	0.30
„ 28,.....	0.285	2	...	0.16
„ 29,.....	2.585	3	2.66	2.10
„ 30,.....	0.920	4	1.21	0.80
.....	...	...	...	...
Total,.....	11.955	81	12.72	11.06

Hongkong Observatory, 8th August, 1884.

W. Doberck,
Government Astronomer.

HONGKONG OBSERVATORY.

Weather Report for July, 1884.

In the *China Coast Meteorological Register*, based on information transmitted by the Great Northern and the Eastern Extension Telegraph Companies—which I have published daily, is given a summary of the atmospheric circumstances in Manila and along the Coast of China between Haiphong and Shanghai. It also contains information concerning the weather in Nagasaki and Wladiwostock.

On the first of July light SW winds and fine weather prevailed over the China Sea. The barometer had risen along the Coast and the humidity had decreased in the wake of Typhoon I, which disappeared towards NE at the end of June. In the afternoon the barometer began to fall over Luzon, but continued rising along the Coast, and gradients indicated light winds. On the 3rd the weather continued fine, the sea smooth and moderate SW winds prevailed, but in the afternoon upper clouds were observed over Hongkong to come up from NNE. The barometer continued to rise here, but was falling in Manila, where the wind shifted towards N. At this time Typhoon II was E of Luzon. On the 4th the same phenomena prevailed, but the wind backed towards S in Manila, where at 10 a. the weather was squally and wet. The centre of the depression appears to have been situated in 16° 9′ N and 122° 54′ E. At 10 a. on the 5th in 17° 15′ N and 119° 16′ E it had already crossed the Island, accompanied by heavy rain and squalls, but an apparently small area of strong wind. The barometer was then falling along the Coast and the temperature had risen in Hongkong, but fine weather and light winds prevailed, and over Luzon, the wind quickly went down to a gentle breeze. At 10 a. on the 6th the centre was in 18° 33′ N and 116° 48′ E and the sky became overcast in Hongkong, where a moderate NE breeze changed to a strong E breeze later in the day. Fine weather reigned still over Hainan, as well as in Amoy, but at midnight the log of the S. S. *Phra Chom Klao* then in Lat. 15° N Long. 110° 20′ E contains the following entry:—"Moderate wind and overcast with vivid lightning and threatening appearance towards NNE, and a heavy swell from that quarter," which shows that the disturbance at the time, was making itself felt over the greater portion of the China Sea. At 10 a. on the 7th the centre was in 18° 44′ N and 113° 22′ E. The weather became threatening over Hainan, thundersqualls were felt, the NE breeze freshened during the day and a strong current of water set in from the East. A moderate E gale blew in Hongkong with a rising barometer. On the whole the winds appear to have been more violent in the right semi-circle, than in the left. The progressive speed of the disturbance was now quickly increasing, and about midnight the centre entered the Island of Hainan. At 2 a. on the 8th the centre passed, perhaps, within a distance of 60 miles South of Hoihow. From observations by Captain MARSDEN of the S. S. *Rory* and others, then at anchor in the harbour, it appears that between one and three o'clock, the barometer was nearly steady at 29.00, and the wind which before the first named hour blew a whole gale from North now veered to SE with a force varying between a light and moderate breeze, and during the above interval, the sky partially cleared. Subsequently the rain poured down again and the wind rose to at least storm-force at 4 a. The centre had completed its passage of the island and appears to have been at 10 a. on the 8th in 20° 22′ N and 108° 30′ E. In Pakhoi, the barometer had reached its minimum and a whole E gale of wind was blowing. In Tonquin,—where of course the barometer had been falling steadily,—the weather still continued fine, the sky was partly clear and a light breeze blew from NNW. In the Gulf of Tonquin the typhoon appears, at first, to have moved towards NW, but to have been deflected by the coast so that it approached Haiphong from the East, passing close South of that town at about half past six in

the evening, when the barometer fell to 29.00. It caused great destruction in the French Settlement in that neighbourhood, the inhabitants of which were evidently quite unprepared for such an occurrence. 2.4 inches of rain were collected on the 8th and 4.8 inches on the 9th, but the wind does not appear to have reached typhoon-force and perhaps did not exceed a whole gale. The typhoon then disappeared in its motion westward.

Meantime light southerly and south-westerly winds had blown over Luzon and the barometer had been rising. The rise was checked in the afternoon on the 8th, after which it fell quickly, owing to Typhoon III, which was then approaching the Bashee Channel from about SE. In the evening upper clouds were observed in Hongkong coming from ENE and backing quickly to NNE. In the morning of the 9th, when the centre was in about 15° 23′ N and 125° 16′ E at 10 a., the barometer began to fall at the S. Cape of Formosa, where haze was observed later in the day, and in the evening it fell decidedly in Hongkong. At 10 a. on the 10th the centre appears to have been in about 16° 35′ N and 123° 42′ E. The NE wind increased to a strong breeze at S. Cape, where a heavy swell had set in from the SSE and the threatening appearance of the sky increased and it was blowing from WSW with the same force in Manila. In the evening when the centre was passing round the NE point of Luzon, strong NE winds and a high sea were encountered outside of Amoy, but the wind was light and the weather fine elsewhere along the coast. The gale was still blowing over Luzon, but the direction of the wind had backed to SW in Manila. Heavy rain had then already fallen at S. Cape. At 10 a. on the 11th the centre appears to have been in 19° 47′ N and 121° 25′ E, and fresh NE gales with high sea, and squally weather prevailed in the Formosa Straits, and strong W breezes over Luzon. At S. Cape a moderate gale blowing from the North brought down heavy rain, and the Temperature was 77°,—rather low. At 1 p. the Temperature rose to 80°, a thick mist appeared and the wind shifted to ENE, from which point it kept steady, its force increasing from a fresh breeze to a storm at 7 p. At 8 p. the wind began to die out. At 8ʰ 40ᵐ p. the lowest reading of barometer 28.36 reduced to 32° but not to sea level was recorded and the wind shifted to SE and the sky partly cleared. The central calm—the "bull's eye" of the mariners—appears to have then been situated about 12 miles towards WSW of the light-house. The wind thereafter veered and when it reached SSW—from which it again continued to blow steadily for 12 hours—at 9ʰ 30ᵐ, it attained to full typhoon-force, being as violent as any that Mr. G. Taylor, the light-keeper in charge, had ever experienced. By this time the NE wind had increased to the force of a whole gale at Takow with rain. At 10 p. it had increased to storm force and then it died away, the wind veering to S. The calm passed over the locality at about 11ʰ 15ᵐ p. Ten minutes later, the full force of the typhoon broke from SW, with terrific gusts and heavy rain. After midnight it moderated. At 1 a. on the 12th it blew a strong gale in Takow, but now it was blowing with typhoon-force from NE at Ockseu, over which the centre had nearly passed about midnight. A strong E gale was felt at that time at the northern entrance of the Straits, and a whole gale from S with heavy rain in the southern part of the Straits, and at Takow at 3 a. a moderate SE gale with heavy rain squalls. At 10 a. when the centre was in 25° 55′ N and 118° 30′ E the sky cleared in Takow, the rain ceased and a fresh breeze blew from SSW. The typhoon was then blowing in terrific squalls accompanied by blinding rain at Ockseu, and at that time, the centre appears to have been due West of Foochow. Here squally weather with a gale from NE, had been felt in the course of the night. During the 12th the weather got worse and a strong gale from SSE with heavy squalls and much rain did considerable damage about the place. The humidity at Hongkong was then beginning to fall and the temperature to rise steadily, and upper clouds were coming up from NW. A strong breeze blew from SW during the afternoon but no rain fell. In Amoy the wind does not appear to have exceeded a fresh breeze.

It appears as if this typhoon—like many others following a similar track through the Formosa Straits—would have recurved in about 23° N latitude, but was prevented from passing north eastward by the high mountains of the island; and—in contra-distinction to Typhoon I at the end of June which skirted the coast and effected the recurvature north of the island—it at about 11 p. on the 11th suddenly turned north westward and thus struck the opposite coast early in the morning of the 12th. At about 10 a. on the 13th in about 28° 50′ N and 117° 42′ E the centre of the Typhoon appears to have attained its greatest distance inland, but the violence of the disturbance died out and it lost the characteristics of a Typhoon as soon as it struck the coast and only gentle breezes are reported at inland stations. Strong southerly breezes and high seas prevailed in the Straits. At about 10 a. on the 14th it passed northwest of Shanghai, where a fresh breeze from SSE had been felt for some hours in the afternoon of the 13th. The sky became clouded and about half an inch of rain fell in the afternoon but the wind died out. The depression then passed off towards ENE. On the 13th, according to the Daily Weather Reports issued from the Imperial Meteorological Observatory of Tokio, Japan, the barometer had been falling, especially over the Inland Sea, and was under the monthly mean at all their stations, and calms and variable winds prevailed with rain in many places. On the 15th the following remarks were issued by Mr. Knipping:—"A depression coming from the W is entering the Sea of Japan with "decided fall and the lowest barometer readings (29.61 inches) on the W coast, the highest (29.7 "inches) in Eastern Nippon. Winds are generally light and the weather rainy in the S;" and subsequently it was intimated that the minimum of pressure had travelled NE and was lying off Sakai in the Sea of Japan, with much rain in Central Japan. At 9 p. the centre was in about 38° 12′ N and

136° 28′ E and it appears that a fresh gale was felt in Yokohama. On the 16th at 10 a. the centre is marked as lying in Northern Nippon and it was remarked that it was getting shallower, at the same time the barometer fell in Wladiwostock where the weather was overcast and foggy and a gentle E breeze was reported. Later on during the day it passed eastward, but so far I have not been able to gather any information about its further career.

Meantime the Barometer had been rising in Hongkong with fine weather, but in the morning of the 15th upper clouds were observed coming from about NE and in the afternoon the barometer commenced falling. At the same time it was falling over Luzon and at S. Cape, Formosa. Moderate SW winds prevailed and clouds formed over the China Sea on this, and on the following day, another typhoon having originated far in the East. On the 17th and 18th squally and wet weather prevailed over Luzon and the SW wind attained now the force of a strong breeze. On the latter date the fall of the barometer was checked in Hongkong and Manila, but continued to fall over Formosa, where a gentle NW breeze was felt. This freshened on the evening of the 19th, to a strong breeze from the same quarter at the S. Cape, the atmosphere at the same time becoming hazy. At this time Typhoon IV which perhaps originated in the Pacific to the east of Luzon, appears to have been East of Formosa. The barometer began to rise over Luzon and the Captain of the S.S. *Esmeralda* who left Manila at 10 a., mentions the sky at sunset as having a red lurid appearance. At 10 a. on the 20th the centre must have been situated in about 22° 8′ N and 125° 31′ E. Squally weather with moderate SW breezes continued over Luzon and a heavy NE swell was remarked over the sea to the NW of the island and a strong NW breeze or moderate gale at S. Cape, the weather, at the latter place, being misty and squally. More moderate winds but overcast and wet weather prevailed in the North of Formosa. Thunderstorms had passed in the neighbourhood of Hongkong and the falling barometer attained its minimum at 6 p. on the 21st. On the 20th the temperature rose and the following day heavy rain fell and an upper current from SE was observed. Over Luzon squally weather continued and the rain fell in torrents, in fact, over the greater part of the China Sea the weather was gloomy and threatening but only moderate SW breezes were blowing. The Typhoon had hitherto remained in the Pacific and it might at the time have been surmised that it would—like other disturbances in this locality—recurve and pass away towards NE, but in the morning hours of the 21st it appears to have altered its course, which hitherto, appears to have been from SE, or thereabout, and it now directed itself towards WNW. At 7 p. on that day the position of the centre was in about 25° 41′ N and 121° 30′ E. The previous evening the NW wind had already risen to a moderate gale with squally weather at Tamsui, and about midday on the 21st, the wind began to back, reached SW and rose to a whole gale from that quarter at 9 p. Hard gales, heavy seas and great rain were encountered North of Formosa, a moderate E breeze with rainy weather was observed in Shanghai, and moderate SW winds and showery weather with occasional thunderstorms, in the northern portion of the China Sea. The centre of the disturbance passed north of Middle Dog Lighthouse (25° 59′ N, 120° 2′ E) in the early morning hours of the 22nd, where it shortly after blew a strong gale, but at the other points along the coast the gale was moderate. The wind calmed down to a moderate breeze at 7 a. on the 22nd in Tamsui. At 10 a. on the 22nd the position of the centre of the barometric depression appears to have been 27° 0′ N and 119° 32′ E. It had a few hours before passed close North of Foochow, where the weather was squally although only gentle breezes were felt, but at this time and during the following day, strong SE breezes were observed in Chinkiang and in Shanghai. The disturbance had lost the character of a Typhoon. The course of the centre became now gradually more inclined northwards. On the 23rd at 10 a. its position may have been about 29° N and 118° E and on the 24th at 10 a. about 31° 18′ N 116° 53′ E; about the latter hour it was raining at Wuhu and a few hours afterwards a fresh SW breeze sprang up. The centre must at this time have been moving straight northwards, but its path now recurved towards NE. It passed South of Chefoo about 10 a. on the 25th the position of the centre at the time being 36° 36′ N and 121° 8′ E. No strong wind or bad weather are reported from that town, but in the afternoon a fresh breeze is reported from the lighthouse on the Northeast Shantung Promontory, in fact the weather was foggy and some rain had fallen. Showers are reported about the same time from Newchwang. Close and oppressive weather is also reported from Korea on the 23rd and 24th. At 6 p. on the latter day upper clouds coming from WSW were there observed by an officer on board H. M. S. *Flying Fish*, and the barometer had been falling steadily since noon. In the morning of the 24th the wind from South increased in Squalls. At noon, East of the NE Shantung Promontory, the wind had increased to a strong breeze from SE. Heavy rain fell and the sea was high. Subsequently the *Flying Fish* encountered a fresh gale. It appears that the force of the disturbance was increased when it took to the sea again. It struck the coast of Korea about 10 p. the same day in 37° 55′ N and 124° 55′ E. It is probable that it subsequently passed north-eastward, as the barometer was falling in Wladiwostock with overcast and wet weather. The lowest reading of the barometer 29.35 was recorded at 10 a. on the 26th, but no wind was felt at the time.

On the 21st, the sky cleared in Hongkong. On the 22nd upper clouds were observed at first coming up from East and subsequently from NE, but the barometer was rising at the time, and in fact did not attain its maximum till about 1 a. on the 27th. On the 23rd, the sky cleared over Luzon. Although a very strong SW wind was blowing over the Southern part of the China Sea, light S and SW winds prevailed over the sea to the North and West of Luzon, but the barometer attained its maximum height here as well as at S. Cape, Formosa, already on the 24th, and the weather became

shortly after again unsettled in Manila. This was owing to Typhoon V then apparently approaching from the SE. On the 25th, it appears to have been East of Luzon, moving slowly towards NW. At 10 a. on the 26th, the position of the centre was perhaps in 15° 14′ N, and 123° 13′ E. In the afternoon, the weather was squally and wet, and at the same time the atmosphere became hazy at S. Cape, Formosa, where a gentle NE breeze was blowing. Early next morning, the centre appears to have entered Luzon where the weather was very bad. At 10 a. its position may have been in 16° 15′ N, and 121° 8′ E. At 10 a. on the 28th, it was in 17° 30′ N, and 118° 56′ E. The weather continued close and misty over Luzon, and rain fell at S. Cape, but it was fine over Hainan and in Hongkong, where light breezes were blowing. In the Formosa Straits moderate NE winds were felt, but in the China Sea between Hongkong and Hainan strong N winds, squally weather with heavy rain and a rising sea were already then encountered. In the evening it looked gloomy here, and in the early morning hours of the 29th, the centre approached nearest to Hongkong, where a strong NE gale accompanied by overcast and wet weather was blowing. At 10 a. on the same day, the centre appears to have been in 19° 18′ N, and 113° 54′ E. The weather continued overcast, heavy rain fell and the sea was high and confused, but the wind had calmed down over that part of the sea which had been visited by the typhoon on the previous day. On the North Coast of Hainan there blew with increasing force a strong N breeze. The appearance of the sky was threatening. Dirty looking clouds were coming swiftly from NE, and the sea was rough. In Pakhoi a strong WNW breeze, but fine weather was recorded. In the evening a fresh NNE gale which increased to a strong gale at midnight, blew in heavy squalls with great rain on the North Coast of Hainan, and the sea was high. The Easterly current on the Hoihow Roads is estimated by the Captain of the S.S. *Anton* to have been 2 miles an hour during the 24 hours of the 29th, and is estimated to have been from 4 to 5 miles an hour on the 30th by the Captain of the S.S. *Greyhound*. On the 30th at 10 a. the centre was in 18° 38′ N and 111° 7′ E. In the gulf of Tonquin, a strong N breeze had blown during the night, and the sky had been partly clear, but in the morning, the Captain of the S.S. *Ping On* then travelling from Haiphong to Pakhoi remarked the more and more threatening look of the sky, and the clouds coming up fast from NE. At 10 a. heavy squalls with rain were encountered, and the wind began to veer towards NE, its force being then a fresh gale. A whole gale blew North of Hainan, a fresh ESE gale in Hongkong—where the weather was wet and felt close and oppressive,—and a gentle SE breeze in the Southern parts of the China Sea, where fine weather and a smooth sea prevailed. The centre appears to have approached nearest to Kiungchow at about 11 a. when the wind began to calm down somewhat and the sky to clear, but this was succeeded by a whole gale from SE with very heavy rainsqualls. At midnight this went down to a light breeze with a clear sky. During the early morning hours of the 31st the wind blew with typhoon force accompanied by rain squalls in the Gulf of Tonquin, but as the morning wore on the weather improved. At 10 a. on the 31st the centre was perhaps in 17° 12 N and 105° 30′ E. It appears to have struck the Coast of Northern Annam a few hours before this. Concerning the weather that obtained over the sea immediately south of Hainan—the coast of which the centre of the Typhoon appears to have touched—I have not been able to gather any information. Lower down in the China Sea the weather was fine and the wind a moderate SW breeze, but the S.S. *Japan* at noon on the 31st in 9° 33′ N and 109° 28′ E encountered squally weather, the wind veered to WNW the breeze blew strong and a threatening appearance was observed towards NW. The weather cleared up however in a few hours. Meantime the weather in the North of China was fine, as is usual during the passage of a Typhoon over the China Sea. After the Typhoon had passed, light SE winds blew over the China Sea.

The Barograph and the Standard Barometer at the Observatory are placed 110 feet above Mean Sea Level. The bulbs of the Thermograph Thermometers are 111 feet above Mean Sea Level and 6 feet above the ground. They are exposed in an unpainted and double-louvered zinc screen fixed to the north wall of the main building in a shaded position. The Solar Radiation Maximum Thermometer is 109 feet above Mean Sea Level and 4 feet above the ground, and the Terrestrial Radiation Minimum Thermometer is about one inch above the ground. They are placed over dry earth, as the ground round the Observatory had not yet been turfed. The self-recording Rain-gauge is placed 106 feet above Mean Sea Level, and the rim, which is $11\frac{1}{4}$ inches in diameter, is 21 inches above the ground. The cups of the Anemograph are 45 feet above the ground, and 150 feet above Mean Sea Level.

At Victoria Peak the Instruments, except the Radiation Thermometers, are placed in the Look-out. The Barometer is about 1823 feet above Sea Level. The bulbs of the Thermometers are about 4 feet above the floor, except the Maximum Thermometer, which is a few inches higher. The Radiation Thermometers are placed at the same height above the ground as at the Observatory. At Cape d'Aguilar the Thermometers are placed about 170 feet above Sea Level (according to the *Government Gazette*) in a wooden screen 2 feet above the ground, except the Maximum Thermometer, which is a few inches higher.

Table I exhibits the hourly readings of the height of the Barometer reduced to 32.0 Fahrenheit, but not to Sea Level, as measured (at two minutes to the hour named) from the Barograms. The Mean Height of the Barometer was 29.581, the Highest was 29.806 at 10 a. on the 4th, and the Lowest was 29.362 at 6 p. on the 21st. The Barometric Tide amounted to 0.061.

Table II exhibits the hourly readings of the Temperature (Dry Bulb Thermometer) as measured from the Thermograms (at two minutes past the hour named), and also the Extreme Temperatures during the day. The Mean Temperature was 82.2, the Highest was 93.1 at 3*h*. 12*m*. p. on the 20th and the Lowest was 74.1 at 0*h*. 18*m*. p. on the 2nd.

Table III exhibits the hourly readings of the Temperature of Evaporation (Damp Bulb Thermometer) as measured from the Thermograms (at two minutes past the hour named) and also the Solar Radiation Maximum (Black Bulb) and Terrestrial Radiation Minimum Temperatures.

Table IV exhibits the Mean Relative Humidity in percentage of saturation (the humidity of air saturated with moisture being 100) and Mean Tension of Aqueous Vapour present in the air expressed in inches of mercury, for every hour in the day and for every day in the month. The Mean Tension, which exhibits a small daily variation, was 0.908. The Mean Relative Humidity, which exhibits a great daily variation, was 83.

Table V exhibits the Duration of Sun-shine as registered by aid of the Sun-shine Recorder from half an hour before to half an hour after the hour named. The Sun shone 184.5 hours during the month.

Table VI exhibits the amount of Rain registered from half an hour before to half an hour after the hour named. The Total Rain-fall during the month was 13.075 inches. It rained during 81 hours. The greatest Hourly Rain-fall was 1.760 at 8 a. on the 21st.

Table VII exhibits, for every hour in the day, the Velocity of the Wind and its Direction in numbers (8=E, 16=S, 24=W, 32=N) as measured from the Anemograms. The Velocity is the number of miles traversed by the Wind, from half an hour before to half an hour after the hour named. The Direction is read off at the hour, except when the Wind is very light and changeable, when the average Direction during the hour is estimated, taking into account the Velocity from different quarters. The Direction is not noted when the Velocity is below 1.5 miles an hour.

The Mean Velocity was 14.3 miles an hour. It was greatest during the middle of the day. The Velocity exceeded 35 miles an hour on the 6th, the 7th, the 8th, the 28th, the 29th, the 30th and the 31st.

The Total Distance travelled by, as well as the Duration and average Velocity of Winds from different quarters were as follows:—

Direction.	*Total Distance.*	*Duration.*	*Velocity.*
	Miles.	Hours.	Miles per hour.
N	76	15	5.1
NE	714	50	14.3
E	5,074	236	21.5
SE	1,478	76	19.5
S	1,001	109	9.2
SW	1,205	88	13.7
W	784	85	9.2
NW	254	45	5.6
Calm	25	40	0.6

Table VIII exhibits, for every hour in the day, the Velocity of the Wind reduced to 4 and also to 2 Directions, as well as the Mean Direction of the Wind.

Table IX exhibits the Direction (to two points) and Force of the Wind (0-12) at Victoria Peak. The Average Force of the Wind was 3.8 corresponding to 22 miles an hour. The Sea Disturbance (0-9) exhibited in the same table has been derived from observations made at Cape d'Aguilar.

Table X exhibits the Amount (0-10), Name and Direction, whence coming, of the Clouds. Where the names of Upper and Lower Clouds are given, but only one Direction, this refers to the Lower Clouds. The prevailing Direction of the Wind at the Observatory, as shewn in Table VIII, was about ESE; at the Peak, as shewn in Table IX, S by E; the Direction of the Lower Clouds was SSE. On an average 63 per cent of the sky were clouded.

Table XI and Table XII exhibit the readings of the Barometer reduced to 32.0 Fahrenheit but not to Sea Level, and the Thermometers at Victoria Peak and at Cape d'Aguilar.

The Mean Height of the Barometer at the Peak was 27.892. The Mean Temperature was 74.7 at the Peak and 81.5 at Cape d'Aguilar, the Highest was 80.9 on the 11th at the Peak and 91.3 on the 19th at Cape d'Aguilar, and the lowest was 70.0 on several days at the Peak, and 73.6 on the 29th at Cape d'Aguilar.

The Mean Temperature in Hongkong decreased one degree Fahrenheit for every 240 feet ascended.

Table XIII exhibits the Relative Humidity as determined from observations of the Dry and Damp Bulb Thermometers. The Mean Relative Humidity at the Observatory was 83, at Cape d'Aguilar 90, and at Victoria Peak 97. These numbers are reduced to the mean of the 24 hours by aid of Table IV. The Least Relative Humidity registered was 58 at 4 p. on the 15th at the Observatory, 70 at 10 a. on the 28th at the Peak, and 72 at 10 a. on the 19th at Cape d'Aguilar.

Table XIV exhibits the Tension of Aqueous Vapour at the Observatory and at the Peak. The Mean Tension was 0.908 at the Observatory, and 0.816 at the Peak. The Greatest Tension registered was 1.026 at 4 p. on the 22nd at the Observatory, and 0.939 at 4 p. on the 11th at the Peak. The Least Tension was 0.799 at 10 p. on the 28th at the Observatory, and 0.663 at 10 a. on the 28th at the Peak.

Table XV exhibits the amount of Rain measured at 10 a. on the following day, and the duration of Precipitation at the Observatory. The greatest amount fell on the 20th when it rained 3.710 at the Observatory, 6.87 at Stone Cutters' Island, and 4.80 at the Peak.

Thunder and Lightning continued from the evening of the 30th June up to the morning of the 3rd July and a Thunderstorm passed between 4 a. and 8 a. on the 1st.

Lightning and distant Thunder were registered in the evening of the 3rd and continued till the following morning.

Thunder was heard in the afternoon of the 10th, and at 8 p. a slight Thunderstorm passed but not close.

Faint Lightning was registered in the evenings of the 11th, the 12th and the 16th.

Faint Thunder and Lightning were noticed during the day on the 17th, during the following night and in the evening on the 18th.

Strong Lightning was seen in the evening of the 19th and also faint Thunder heard during the following night.

Faint Lightning was noticed in the evening on the 20th.

During the night strong Thunder and Lightning were observed, which culminated in a heavy Thunderstorm that passed over the Observatory at $6h.$ $15m.$ a. followed by another at $8h.$ $30m.$ a.

The following night Lightning was seen and faint Lightning in the evening on the 22nd.

Faint Lightning was seen in the evening on the 23rd, Thunder and Lightning prevailed during the following night and distant Thunder was heard all day on the 24th. A severe Thunderstorm passed overhead at $8h.$ $40m.$ p. Thunder and Lightning continued up to the following afternoon.

Faint Lightning was seen in the evening on the 26th, 27th and the 28th.

Unusual visibility was noticed on the 5th, the 13th, the 14th, the 19th, the 22nd, and the 27th.

Dew fell in the evenings of the 5th and 21st.

A Lunar Halo was seen in the evening of the 3rd.

Rainbows were seen at $5h.$ $30m.$ p. on the 8th and at 6 p. on the 18th.

BAROMETRIC PRESSURE FOR THE MONTH OF JULY, 1884.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means.
July 1, ...	29.594	29.590	29.580	29.579	29.583	29.609	29.611	29.625	29.630	29.622	29.609	29.601	29.590	29.579	29.585	29.575	29.572	29.585	29.596	29.621	29.643	29.652	29.655	29.640	29.605
„ 2, ...	.620	.620	.618	.626	.639	.651	.654	.671	.685	.684	.684	.668	.689	.692	.669	.671	.691	.682	.690	.700	.704	.732	.718	.701	.673
„ 3, ...	.698	.698	.683	.675	.680	.683	.700	.718	.724	.735	.743	.728	.715	.706	.689	.690	.691	.707	.714	.745	.768	.781	.783	.768	.718
„ 4, ...	.751	.737	.722	.728	.731	.756	.775	.790	.800	.806	.806	.799	.782	.769	.763	.745	.741	.742	.753	.772	.783	.790	.798	.784	.768
„ 5, ...	.761	.756	.742	.730	.731	.739	.742	.743	.735	.736	.727	.710	.692	.679	.668	.665	.665	.663	.661	.676	.689	.689	.671	.666	.706
„ 6, ...	.653	.633	.613	.622	.613	.613	.610	.608	.611	.618	.621	.608	.585	.573	.545	.530	.519	.528	.534	.559	.563	.579	.574	.557	.586
„ 7, ...	.539	.537	.518	.513	.516	.509	.517	.533	.539	.551	.557	.540	.521	.533	.526	.528	.525	.529	.553	.600	.612	.621	.621	.619	.548
„ 8, ...	.603	.595	.583	.575	.589	.614	.605	.656	.678	.695	.717	.711	699	.693	.682	.670	.668	.674	.698	.716	.734	.760	.761	.756	.672
„ 9, ...	.743	.736	.731	.722	.720	.731	.745	.756	.764	.768	.766	.754	.739	.720	.704	.702	.688	.691	.696	.712	.728	.739	.736	.722	.730
„ 10, ...	.694	.682	.671	.667	.667	.682	.687	.695	.695	.684	.654	.634	.611	.590	.583	.552	.554	.564	.575	.592	.594	.606	.603	.576	.630
„ 11, ...	.553	.549	.537	.528	.522	.535	.530	.529	.520	.504	.482	.456	.437	.421	.406	.399	.383	.385	.388	.409	.406	.404	.398	.387	.461
„ 12, ...	.379	.373	.373	.374	.390	.403	.420	.443	.440	.438	.463	.458	.451	.443	.433	.425	.427	.443	.460	.474	.491	.498	.499	.496	.437
„ 13, ...	.508	.503	.509	.500	.511	.531	.543	.556	.570	.581	.581	.576	.571	.550	.542	.534	.532	.543	.558	.576	.592	.612	.612	.614	.554
„ 14, ...	.601	.600	.599	.607	.607	.609	.624	.618	.629	.632	.637	.626	.615	.606	.592	.579	.570	.580	.588	.606	.623	.628	.629	.618	.609
„ 15, ...	.612	.614	.609	.616	.623 †	.631 †	.641	.643	.645	.636	.630	.621	.612	.589	.568	.550	.536	.552	.564	.574	.585	.618	.612	.614	.604
„ 16, ...	.599	.580	.577	.574	.575	.583	.588	.599	.609	.619	.602	.592	.571	.556	.525	.502	.509	.519	.541	.568	.580	.587	.589	.580	.572
„ 17, ...	.566	.569	.553	.547	.538	.548	.554	.567	.572	.569	.571	.566	.535	.517	.504	.500	.500	.505	.521	.537	.560	.577	.568	.552	.546
„ 18, ...	.531	.516	.502	.501	.497	.520	.536	.549	.562	.556	.538	.533	.523	.517	.508	.505	.505	.519	.537	.552	.564	.583	.575	.563	.533
„ 19, ...	.552	.536	.528	.527	.530	.531	.534	.543	.559	.559	.553	.536	.519	.504	.487	.474	.473	.478	.488	.507	.527	.547	.544	.529	.524
„ 20, ...	.515	.495	.496	.493	.492	.498	.504	.519	.522	.524	.509	.492	.471	.462	.442	.425	.419	.423	.437	.444	.451	.488	.474	.469	.478
„ 21, ...	.440	.430	.420	.404	.407	.415	.429	.471	.461	.460	.449	.449	.429	.405	.379	.375	.372	.362	.377	.386	.409	.430	.430	.418	.417
„ 22, ...	.405	.399	.391	.392	.407	.417	.421	.446	.452	.460	.465	.463	.449	.442	.438	.427	.417	.436	.451	.472	.488	.520	.522	.518	.446
„ 23, ...	.508	.510	.511	.509	.506	.516	.532	.545	.549	.557	.555	.549	.546	.540	.526	.520	.519	.533	.562	.586	.595	.606	.599	.598	.545
„ 24, ...	.576	.579	.575	.574	.573	.588	.600	.614	.613	.622	.635	.625	.635	.618	.607	.595	.583	.582	.613	.618	.670	.641	.619	.625	.609
„ 25, ...	.618	.607	.597	.591	.608	.615	.623	.632	.652	.657	.655	.653	.641	.633	.621	.617	.616	.623	.615	.615	.625	.630	.635	.635	.626
„ 26, ...	.625	.618	.609	.612	.615	.632	.637	.640	.658	.660	.669	.657	.639	.629	.619	.613	.602	.600	.617	.637	.658	.670	.667	.664	.635
„ 27, ...	.648	.637	.629	.630	.634	.637	.650	.648	.648	.648	.634	.615	.605	.598	.591	.571	.564	.556	.567	.576	.595	.596	.588	.581	.610
„ 28, ...	.559	.566	.546	.530	.541	.541	.534	.526 †	.519 †	.516 †	.501	.483	.476	.468	.458	.448	.436	.434	.447	.452	.482	.479	.467	.467	.495
„ 29, ...	.422	.406	.401	.418	.420	.420	.444	.474	.488	.478	.467	.466	.460	.455	.452	.442	.450	.456	.455	.492	.517	.528	.531	.528	.461
„ 30, ...	.503	.489	.494	.491	.488	.518	.532	.552	.563	.577	.583	.579	.562	.557	.556	.553	.553	.566	.589	.598	.609	.628	.637	.627	.559
„ 31, ...	.609	.605	.603	.600	.615	.616	.625	.639	.648	.663	.661	.665	.663	.654	.635	.639	.640	.653	.671	.684	.702	.705	.706	.705	.650
Hourly Means, ...	29.580	29.573	29.565	29.563	29.567	29.577	29.585	29.598	29.605	29.607	29.604	29.594	29.582	29.571	29.558	29.549	29.546	29.552	29.565	29.583	29.598	29.610	29.607	29.599	29.581

† Approximate Reading.

TABLE II.

TEMPERATURE FOR THE MONTH OF JULY, 1884.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means.	Max.	Min.
July 1,	82.1	82.0	82.1	82.0	80.2	77.6	77.9	78.9	80.7	84.2	85.9	81.6	85.0	86.1	84.5	84.3	84.1	83.4	81.9	81.6	81.4	81.9	81.9	81.5	82.2	86.9	77.0
" 2,	81.5	81.3	81.1	80.8	80.6	81.1	83.6	84.8	85.0	84.4	80.9	80.3	75.1	75.8	75.8	76.1	76.7	76.6	76.6	76.8	76.9	77.0	76.9	76.8	79.3	85.9	74.1
" 3,	76.9	77.0	77.0	77.2	77.8	77.9	79.6	81.1	83.1	80.2	83.6	86.9	86.1	87.8	88.2	88.5	85.2	83.8	82.3	81.7	80.7	80.5	80.0	79.8	81.8	88.7	76.8
" 4,	80.1	80.0	79.9	79.9	80.0	80.5	77.9	79.8	80.3	82.0	80.1	81.5	85.5	86.4	86.8	86.1	86.0	83.7	82.5	81.5	81.0	80.3	80.2	80.2	81.8	88.1	77.2
" 5,	80.0	79.5	79.6	79.5	79.2	79.9	81.8	82.3	84.6	86.3	86.9	86.3	88.6	89.6	89.7	87.6	86.2	84.2	82.7	81.7	80.8	80.4	79.8	79.6	83.2	91.1	79.1
" 6,	79.5	79.5	79.9	79.2	80.1	80.9	82.0	83.2	83.4	83.8	83.3	80.1	80.2	80.9	81.7	81.8	81.1	80.9	80.6	80.9	80.7	80.2	80.2	78.6	80.9	83.9	78.6
" 7,	79.0	79.1	79.3	79.4	79.9	79.9	80.3	81.3	82.2	82.0	82.6	82.2	82.4	79.0	77.3	77.8	76.2	76.8	77.0	77.0	77.3	78.6	79.1	80.3	79.4	83.7	76.2
" 8,	80.3	80.3	80.2	80.1	79.8	80.1	81.0	81.7	81.8	81.9	83.1	82.9	83.3	84.2	84.4	83.3	83.2	82.2	80.8	80.6	80.3	80.5	80.0	79.2	81.5	85.0	79.2
" 9,	79.7	79.6	79.4	79.3	79.5	79.2	79.2	81.6	82.8	83.5	84.4	86.1	88.1	88.3	88.8	88.9	87.0	84.1	82.0	81.1	80.7	80.3	80.3	79.8	82.7	90.1	79.0
" 10,	79.6	79.0	78.6	78.2	77.9	78.1	79.8	81.6	83.6	85.2	86.4	85.0	84.1	83.7	85.2	85.1	82.2	82.1	81.0	80.0	79.5	79.1	79.1	78.7	81.4	88.2	77.9
" 11,	78.2	78.3	78.2	78.2	78.2	78.7	80.0	81.1	81.9	82.9	84.1	84.8	85.2	85.1	87.4	88.3	87.6	86.7	85.0	84.4	84.2	84.0	83.2	83.4	82.9	88.6	78.1
" 12,	82.3	82.0	81.9	82.4	82.1	82.5	83.5	84.1	85.0	86.0	87.6	86.1	86.3	87.0	86.5	85.5	85.9	83.8	82.9	82.5	82.4	82.1	81.8	81.5	83.9	87.6	81.5
" 13,	81.7	81.9	81.7	81.5	81.6	81.3	81.8	83.0	83.3	83.9	85.3	85.3	86.6	88.1	90.5	90.2	85.6	84.8	83.1	81.9	81.6	81.7	81.4	81.1	83.7	90.9	81.1
" 14,	81.1	80.7	81.1	80.8	80.4	80.9	81.4	84.5	83.5	84.6	86.1	88.9	90.8	†92.0	†92.3	92.2	89.6	87.0	84.0	82.4	81.4	81.7	80.9	80.3	84.5	92.6	80.1
" 15,	80.2	79.2	79.2	79.1	78.6	79.1	80.3	82.5	84.4	85.3	85.1	88.1	87.6	89.4	90.4	90.2	89.3	87.9	85.1	83.3	82.6	82.1	81.8	81.2	83.8	90.4	78.6
" 16,	80.9	80.9	80.2	80.2	79.8	80.2	81.1	82.8	83.2	84.0	85.1	86.0	88.1	88.8	90.4	89.2	89.4	87.5	84.9	84.2	83.5	82.8	82.2	81.9	84.1	90.7	79.6
" 17,	81.8	81.2	81.1	80.7	80.4	81.1	82.7	83.0	84.1	84.8	84.2	80.8	81.3	85.6	83.1	84.2	84.5	83.5	82.4	81.8	81.1	81.0	80.9	81.0	82.3	85.7	80.4
" 18,	80.4	80.2	80.1	80.0	80.2	80.2	81.9	83.6	84.7	85.9	87.2	89.0	88.4	85.2	84.9	85.2	82.7	83.3	82.4	81.4	80.8	81.1	80.7	80.2	82.9	89.6	79.9
" 19,	80.0	80.0	79.7	79.9	80.1	79.8	81.3	82.2	83.7	84.9	86.2	86.6	88.6	90.8	90.8	91.1	89.4	88.4	86.5	85.5	85.1	84.9	84.4	84.1	84.7	92.2	79.5
" 20,	83.8	83.8	83.4	83.4	83.3	82.4	83.7	85.0	85.6	85.9	86.2	87.5	89.4	90.5	92.2	91.2	90.5	87.1	85.3	85.4	85.2	85.0	84.4	83.9	86.0	93.1	82.3
" 21,	83.5	83.3	83.0	82.9	79.6	77.8	78.1	75.6	75.4	76.7	79.1	81.2	82.9	83.8	86.8	88.1	85.3	84.5	82.9	82.3	82.3	81.9	81.7	81.4	81.7	89.0	74.7
" 22,	81.4	81.1	81.0	80.5	80.3	80.9	81.8	83.0	83.9	84.5	85.3	86.0	†87.0	†89.1	†91.3	†91.1	89.1	86.2	85.1	84.1	84.1	84.1	83.7	83.3	84.5	91.6	80.3
" 23,	83.3	83.1	82.4	82.4	82.3	82.7	83.1	84.2	85.9	86.3	87.1	84.4	87.5	88.1	88.0	87.7	85.8	84.1	83.4	82.9	82.9	82.3	82.0	82.0	84.3	88.4	82.0
" 24,	81.9	82.0	81.9	81.1	81.1	79.9	79.2	77.9	77.8	78.5	80.1	80.6	79.2	77.1	77.3	77.9	78.6	78.5	78.2	77.8	76.8	75.5	76.1	77.2	78.8	82.1	75.2
" 25,	79.1	79.8	80.1	79.9	80.6	79.0	79.8	79.8	79.5	81.2	82.8	78.4	78.7	79.1	79.6	79.5	80.6	79.8	78.8	78.0	78.0	77.8	77.9	78.5	79.4	82.8	77.2
" 26,	78.1	78.1	78.1	78.5	78.7	77.8	78.9	80.2	80.8	82.5	82.8	82.9	85.3	86.2	86.8	82.3	83.1	82.0	80.8	80.2	80.0	79.2	79.0	78.6	80.9	86.9	77.8
" 27,	78.6	78.1	78.3	78.4	78.4	77.9	79.8	81.2	83.1	83.4	84.3	85.0	86.1	86.2	88.9	88.6	88.1	85.4	83.1	81.9	80.7	80.2	80.0	79.3	82.3	89.3	77.8
" 28,	79.1	78.7	78.5	78.4	78.5	78.6	80.2	82.5	84.2	85.8	86.2	87.3	89.6	89.7	84.4	83.2	83.7	83.5	83.3	83.0	82.4	81.6	81.6	81.3	82.7	91.0	78.3
" 29,	80.9	79.6	78.7	78.9	78.8	79.6	79.4	79.9	81.1	80.9	81.7	82.2	81.8	82.6	82.0	82.8	80.8	79.4	79.2	78.1	79.8	79.5	79.4	79.4	80.3	83.4	77.2
" 30,	79.4	79.0	79.3	79.5	79.3	79.2	79.5	79.9	80.0	81.1	82.4	81.6	82.0	83.1	83.0	83.0	81.8	80.5	79.5	79.4	79.0	79.2	79.2	79.0	80.4	83.9	78.6
" 31,	79.3	79.1	79.2	78.5	76.8	78.5	79.7	80.4	81.9	82.4	83.4	83.1	83.6	84.4	85.7	84.1	82.2	80.9	80.1	79.8	79.7	79.6	79.1	78.8	80.8	85.7	76.7
Hourly Means,	80.4	80.2	80.1	80.0	79.8	79.8	80.7	81.7	82.6	83.4	84.2	84.2	85.0	85.6	86.0	85.6	84.6	83.3	82.0	81.4	81.1	80.8	80.6	80.4	82.2	88.0	78.5

† Approximate Reading.

TABLE III.

TEMPERATURE OF EVAPORATION AND RADIATION, FOR THE MONTH OF JULY, 1884.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means.	Sun.	Rad.
July 1,	79.0	78.9	78.7	78.7	77.8	75.9	76.1	77.6	78.1	80.6	80.0	78.9	80.0	80.2	79.7	79.8	80.3	79.8	79.5	78.6	79.1	79.1	78.6	78.2	78.9	152.2	75.4
„ 2,	78.3	78.0	78.1	77.8	77.9	78.7	79.8	80.3	80.3	79.1	78.8	77.7	74.3	74.9	74.9	75.1	75.6	75.2	74.8	75.5	75.6	75.5	75.7	75.6	77.0	140.7	75.0
„ 3,	79.7	75.8	75.9	76.0	76.5	76.5	77.6	78.1	79.6	77.9	79.9	81.2	80.6	81.0	81.7	81.7	80.3	79.7	79.4	78.9	79.8	77.7	77.8	77.8	78.6	151.0	75.4
„ 4,	78.3	78.0	77.7	77.9	77.9	77.9	75.0	76.7	77.6	79.0	78.0	78.5	79.6	80.7	80.3	80.3	80.3	79.2	78.1	78.0	78.2	77.9	78.1	78.0	78.4	149.1	74.3
„ 5,	77.7	77.1	77.3	77.1	77.3	77.8	78.8	78.7	80.0	80.7	80.9	81.1	81.9	81.3	81.5	80.3	80.3	79.2	78.9	78.5	78.0	77.9	77.6	76.5	79.0	152.0	77.1
„ 6,	76.0	75.0	75.2	75.8	75.1	76.3	76.7	76.8	77.1	77.9	77.7	76.8	76.9	77.1	77.1	77.7	77.4	77.2	76.8	76.7	76.4	76.3	76.2	76.4	76.6	140.5	75.6
„ 7,	75.7	75.6	76.1	75.4	75.0	75.3	75.2	75.6	76.1	76.2	77.1	76.7	76.9	76.2	74.5	75.0	74.7	74.9	74.0	74.0	73.2†	76.1	76.7	77.2	75.6	135.9	74.2
„ 8,	77.5	74.7	76.1	76.7	77.0	76.9	77.4	77.8	78.3	78.2	78.2	78.7	78.0	79.4	80.2	78.8	78.9	78.2	77.6	77.7	77.7	77.6	77.7	76.7	77.8	141.8	76.3
„ 9,	76.9	75.9	76.2	76.2	76.6	76.5	76.2	77.7	78.1	78.2	78.8	79.3	80.7	80.3	80.4	80.2	79.7	78.2	77.7	77.1	77.2	77.8	77.9	77.5	78.0	151.2	75.6
„ 10,	77.5	76.8	76.5	75.9	76.2	76.4	77.0	77.7	77.5	77.2	78.3	77.0	78.3	78.3	79.4	79.2	78.0	78.4	77.8	78.4	77.9	77.1	76.5	76.3	77.5	159.2	75.3
„ 11,	76.2	76.1	76.0	76.3	76.0	76.6	77.0	77.8	78.1	78.9	79.5	79.8	80.0	80.0	80.8	80.8	80.7	80.2	79.9	80.5	80.6	80.4	80.2	79.4	78.8	151.0	75.4
„ 12,	79.5	79.5	80.1	79.8	79.8	76.9	77.5	78.0	78.8	77.0	80.2	80.5	80.4	80.4	79.0	78.3	79.4	78.8	78.3	78.4	78.3	78.2	78.0	78.0	78.9	150.6	78.5
„ 13,	78.2	78.0	78.0	77.5	77.7	77.4	77.3	77.9	77.6	77.2	78.0	78.8	79.3	79.7	80.9	81.3	79.5	79.3	78.8	78.0	78.2	78.3	78.1	77.7	78.4	148.3	77.1
„ 14,	77.9	78.0	77.9	77.6	77.5	77.2	78.0	79.3	78.4	79.1	79.1	80.3	80.7	81.4	81.1	80.8	79.9	79.0	78.5	77.5	77.8	77.6	77.6	77.7	78.7	156.1	77.4
„ 15,	77.4	77.0	76.8	76.6	76.2	76.6	77.2	77.7	77.5	77.7	76.8	78.4	77.2	77.8	78.7	78.6	78.8	78.9	78.9	77.9	78.0	78.2	77.1	77.0	77.6	150.9	75.1
„ 16,	76.7	76.8	77.3	77.3	77.0	77.1	78.2	77.7	77.6	77.3	77.5	79.0	79.2	79.5	79.8	80.0	80.5	79.8	79.6	79.0	79.7	79.3	78.9	78.9	78.9	154.8	76.2
„ 17,	78.7	78.7	78.4	78.6	77.8	78.2	78.8	78.4	79.4	78.6	78.9	79.0	78.9	79.8	78.2	79.0	79.0	79.0	78.2	79.3	78.3	78.3	78.8	78.3	78.7	155.4	78.0
„ 18,	78.3	78.0	77.9	78.0	77.9	78.0	78.8	79.6	80.0	79.9	80.1	81.0	81.4	80.9	80.3	79.5	77.8	77.9	77.9	77.5	77.1	76.9	76.5	77.6	78.7	163.0	77.3
„ 19,	77.4	77.5	76.9	77.6	77.8	77.9	77.8	78.4	79.2	79.2	80.0	79.6	79.7	80.9	81.7	82.1	82.1	82.0	81.7	80.8	80.8	80.5	80.6	80.2	79.7	150.3	76.6
„ 20,	80.4	80.3	79.7	79.9	80.0	78.2	78.7	79.0	79.4	79.7	79.9	80.2	81.0	81.6	82.5	82.6	82.3	81.0	81.1	81.7	81.9	79.3	80.0	79.6	80.4	147.8	81.1
„ 21,	79.9	81.0	80.7	81.1	76.3	76.6	76.7	74.7	74.8	75.9	77.9	78.8	79.8	79.8	81.4	81.5	80.9	80.6	81.3	80.1	80.6	80.3	80.0	79.8	79.2	142.6	73.4
„ 22,	79.7	79.6	79.4	79.4	79.1	77.9	78.6	78.7	79.3	78.7	78.8	79.5	80.9	82.3	82.3	83.1	82.0	80.6	81.0	80.3	80.4	80.0	80.2	79.9	80.1	153.0	78.6
„ 23,	79.7	79.0	79.0	78.2	78.7	78.6	78.8	79.3	80.1	80.2	81.4	80.9	81.3	81.5	81.2	80.9	80.4	79.9	79.2	78.9	78.9	79.0	*78.7	78.7	79.7	147.8	79.1
„ 24,	78.7	78.6	78.7	78.1	78.1	76.7	77.1	78.1	78.2	77.0	77.8	77.9	77.7	75.7	76.1	76.9	77.2	77.1	77.0	77.0	75.5	73.9	75.6	76.3	77.0	100.8	74.0
„ 25,	78.0	78.0	78.1	78.0	78.0	76.7	76.7	77.6	77.5	78.3	79.0	76.6	76.3	77.1	77.8	77.8	78.2	77.9	77.1	76.8	76.8	76.7	76.8	77.1	77.5	106.3	74.0
„ 26,	77.0	77.1	77.0	77.2	77.3	76.7	77.1	78.0	77.9	78.4	78.9	78.3	79.6	80.1	80.8	77.3	79.3	79.0	78.1	78.1	77.9	77.3	77.0	76.1	78.0	150.6	76.1
„ 27,	76.1	76.3	76.4	76.1	76.2	76.5	77.5	77.7	78.9	76.2	78.5	76.0	78.2	79.0	78.2	78.1	77.9	78.9	78.0	78.0	77.7	77.2	77.1	77.5	77.4	148.3	75.3
„ 28,	75.0	74.9	74.7	74.5	74.6	76.9	77.5	77.5	78.7	79.9	80.2	80.8	82.1	82.0	79.2	78.9	77.8	76.2	76.2	75.1	75.4	75.4	75.8	75.7	77.3	156.2	76.1
„ 29,	75.8	74.7	75.0	74.9	75.0	75.0	74.0	75.2	75.1	75.9	76.7	75.5	76.2	77.0	76.1	76.3	76.0	75.9	75.8	74.2	75.6	76.1	76.0	75.2	75.5	153.3	74.2
„ 30,	75.2	75.1	75.1	75.8	75.6	75.8	75.8	76.0	76.7	77.5	77.9	77.8	78.6	78.6	79.0	78.3	78.0	77.6	77.3	77.1	77.0	77.0	76.9	76.3	76.9	147.8	75.5
„ 31,	76.7	76.7	76.3	76.3	75.1	76.2	76.3	76.7	77.7	78.0	78.8	78.2	78.2	78.8	78.4	77.0	76.6	75.9	76.1	76.0	75.7	75.6	75.5	75.2	76.8	149.8	75.0
Hourly Means,	77.6	77.3	77.3	77.3	77.1	77.0	77.3	77.7	78.1	78.2	78.8	78.8	79.2	79.5	79.5	79.3	79.0	78.6	78.2	77.9	78.0	77.7	77.7	77.5	78.1	147.0	76.1

* Interpolated. † Approximate Reading.

TABLE IV.

MEAN HOURLY AND DAILY RELATIVE HUMIDITY AND TENSION OF AQUEOUS VAPOU FOR THE MONTH OF JULY, 1884.

Hour.	Hourly Mean.		Date.	Daily Mean.	
	Humidity.	Tension.		Humidity.	Tension
			1884.		
1 a	88	0.911	July 1,.....	86	0.945
2 „	87	0.899	„ 2,.....	90	0.898
3 „	88	0.901	„ 3,.....	86	0.936
4 „	88	0.902	„ 4,.....	85	0.927
5 „	88	0.895	„ 5,.....	82	0.935
6 „	88	0.892	„ 6,.....	82	0.859
7 „	85	0.892	„ 7,.....	83	0.836
8 „	83	0.897	„ 8,.....	84	0.901
9 „	81	0.902	„ 9,.....	80	0.896
10 „	78	0.896	„ 10,.....	83	0.891
11 „	77	0.913	„ 11,.....	83	0.931
Noon.	77	0.913	„ 12,.....	79	0.922
1 p	76	0.921	„ 13,.....	78	0.902
2 „	76	0.926	„ 14,.....	76	0.901
3 „	74	0.920	„ 15,.....	75	0.864
4 „	75	0.917	„ 16,.....	77	0.904
5 „	77	0.917	„ 17,.....	85	0.934
6 „	80	0.916	„ 18,.....	82	0.925
7 „	84	0.915	„ 19,.....	79	0.948
8 „	85	0.910	„ 20,.....	78	0.961
9 „	87	0.919	„ 21,.....	89	0.966
10 „	87	0.910	„ 22,.....	81	0.969
11 „	87	0.912	„ 23,.....	81	0.955
Midt.	87	0.905	„ 24,.....	92	0.905
			„ 25,.....	91	0.918
			„ 26,.....	87	0.921
			„ 27,.....	79	0.873
			„ 28,.....	77	0.865
			„ 29,.....	79	0.819
			„ 30,.....	85	0.879
			„ 31,.....	83	0.869
Mean, ...	83	0.908	Mean,.....	83	0.908

TABLE V.

DURATION OF SUNSHINE.

Date.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.
1884.													
July 1,.....	...	...	...	...	0.5	0.8	...	0.1	0.3	...	...	...	...
„ 2,.....	...	1.0	0.9	...	...	...	...	...	...	...	...	...	...
„ 3,.....	0.1	0.4	0.7	0.2	...	0.2	0.6	0.7	0.4	0.9	0.7	...	...
„ 4,.....	...	...	...	...	...	...	...	0.3	0.1	...	0.2	0.6	...
„ 5,.....	0.3	0.7	0.1	0.9	1.0	1.0	0.5	1.0	0.7	0.6	0.8	0.4	...
„ 6,.....	0.4	1.0	0.9	...	0.2	...	...	...	...	...	...	...	...
„ 7,.....	...	0.6	0.7	0.3	0.1	0.1	0.1	...	...	...	...	...	...
„ 8,.....	...	0.6	0.4	0.9	0.6	0.8	0.6	0.9	1.0	0.7	0.5	0.5	...
„ 9,.....	...	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.7	0.1
„ 10,.....	0.2	0.9	1.0	0.6	0.2	1.0	1.0	0.4	0.3	0.1	0.2	...	...
„ 11,.....	...	0.2	1.0	1.0	1.0	1.0	1.0	0.9	0.8	1.0	1.0	1.0	0.5
„ 12,.....	...	...	...	...	...	0.9	0.6	0.5	0.9	0.7	...	0.4	...
„ 13,.....	...	...	...	...	0.4	0.5	0.1	...	0.3	1.0	0.8	0.1	0.3
„ 14,.....	...	0.6	0.5	0.5	0.2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.4
„ 15,.....	...	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5
„ 16,.....	...	0.2	1.0	0.8	1.0	1.0	1.0	1.0	1.0	1.0	0.6	0.4	...
„ 17,.....	...	1.0	0.1	0.1	0.6	...	...	0.3	0.4	...	0.5	...	...
„ 18,.....	0.1	0.8	1.0	0.9	0.7	0.6	0.9	0.2	...	0.1	0.1	0.5	...
„ 19,.....	0.3	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5
„ 20,.....	...	0.5	1.0	1.0	0.4	0.4	0.1	0.9	0.4	0.8	0.8	1.0	0.2
„ 21,.....	...	...	...	...	...	...	...	...	0.1	1.0	1.0	0.9	0.4
„ 22,.....	0.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.3	0.8	1.0	1.0	0.1
„ 23,.....	...	0.2	0.3	0.7	1.0	0.4	...	0.6	0.7	0.4	0.9	...	...
„ 24,.....	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 25,.....	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 26,.....	...	0.1	0.7	0.4	0.9	0.6	0.3	0.8	0.9	0.8	...	0.8	...
„ 27,.....	0.3	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.6
„ 28,.....	0.1	0.6	1.0	1.0	1.0	0.5	1.0	0.8	0.1	...	...	...	...
„ 29,.....	...	0.5	0.5	0.4	0.9	0.9	0.8	0.8	0.6	0.3	0.5	...	...
„ 30,.....	...	...	...	0.3	1.0	1.0	0.4	1.0	0.9	1.0	0.8	0.6	...
„ 31,.....	...	...	0.1	0.7	0.8	1.0	0.3	0.9	1.0	0.8	0.9	0.1	...
Sums,.....	1.9	14.3	16.9	15.7	17.5	18.7	15.3	18.1	16.2	17.0	16.3	13.0	3.6
Hourly Means, .	...	...	...	...	...	...	...	...	...	...	...	...	...

TABLE VI.

RAINFALL FOR THE MONTH OF JULY, 1884.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Sums.
July 1,	...	...	...	0·025	0·155	0·500	0·220	0·010	0·010	...	...	0·125	...	...	...	...	...	...	0·035	...	0·040	...	...	...	1·120
„ 2,	...	...	...	...	...	...	...	...	...	...	0·200	0·335	0·155	0·110	0·070	0·020	0·050	...	...	0·010	...	...	...	...	0·950
„ 3,	...	...	...	...	...	...	...	...	0·540	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·540
„ 4,	...	0·050	0·040	...	...	...	0·280	...	...	0·130	...	...	...	...	...	...	...	...	...	...	0·015	...	...	...	0·515
„ 5,	0·010	0·010	...	0·005	0·005	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·030
„ 6,	...	...	...	...	...	...	...	...	0·020	...	...	...	...	...	...	0·025	0·015	...	...	0·005	...	0·005	...	0·080	0·150
„ 7,	...	0·020	0·050	...	...	...	...	...	...	...	...	...	0·200	0·355	0·115	0·080	0·050	0·010	...	...	...	...	0·005	...	0·885
„ 8,	0·005	...	...	0·015	0·115	...	...	...	0·065	0·025	...	...	...	...	...	...	...	0·025	...	0·020	...	0·080	...	0·010	0·360
„ 9,	...	...	...	...	...	0·015	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·015
„ 10,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·080	0·030	...	...	...	0·110
„ 11,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 12,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 13,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 14,	...	...	...	...	...	0·005	0·005	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·010
„ 15,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 16,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 17,	...	...	...	...	...	...	...	...	...	...	0·120	0·135	0·020	...	...	...	...	...	...	...	...	...	...	...	0·275
„ 18,	...	...	...	...	...	...	...	...	...	...	...	...	...	0·085	...	...	0·010	...	...	...	...	...	...	...	0·095
„ 19,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 20,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 21,	...	...	...	...	0·950	0·450	0·190	1·760	0·360	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3·710
„ 22,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 23,	...	...	...	...	...	...	...	...	...	...	0·200	...	...	...	...	...	...	...	...	...	...	...	...	...	0·200
„ 24,	...	...	0·070	0·045	...	0·010	0·205	0·140	0·100	0·005	...	...	0·365	0·120	0·055	0·015	...	0·045	0·200	0·660	0·240	0·025	...	0·015	2·255
„ 25,	0·030	...	0·030	...	0·020	0·005	...	0·035	...	...	0·040	0·025	0·030	0·050	0·005	0·165	...	...	...	...	...	...	...	...	0·435
„ 26,	...	0·085	...	...	...	...	...	...	...	...	...	0·010	...	...	...	0·005	..	...	0·005	...	...	...	...	...	0·105
„ 27,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 28,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 29,	...	...	0·020	...	0·010	0·005	...	0·010	0·020	...	...	0·010	0·020	...	0·010	...	0·040	0·035	0·020	0·115	...	...	0·010	0·010	0·335
„ 30,	0·030	0·020	...	...	0·020	0·030	0·020	0·130	0·030	...	...	0·090	...	...	...	...	0·010	...	0·045	...	0·075	0·005	...	0·025	0·530
„ 31,	...	...	...	0·420	0·020	...	...	...	...	...	...	0·010	...	...	...	...	...	...	...	...	...	...	...	...	0·450
Sums,	0·075	0·185	0·210	0·510	1·295	1·020	0·920	2·085	1·145	0·160	0·560	0·740	0·790	0·720	0·255	0·310	0·175	0·115	0·305	0·830	0·400	0·115	0·015	0·140	13·075

TABLE VII.

DIRECTION AND VELOCITY OF THE WIND, FOR THE MONTH OF JULY, 1884.

DATE.	1 a.		2 a.		3 a.		4 a.		5 a.		6 a.		7 a.		8 a.		9 a.		10 a.		11 a.		Noon.		1 p.		2 p.		3 p.		4 p.		5 p.		6 p.		7 p.		8 p.		9 p.		10 p.		11 p.		Midt.		Sums.	Means.
	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.		
July 1,	18	18	18	18	20	19	20	25	19	18	23	11	28	8	31	5	23	7	20	6	19	10	16	13	19	12	16	10	20	8	3	2	6	3	13	5	14	6	18	7	18	9	19	10	18	14	21	7	246	10.2
" 2,	19	10	19	7	17	9	18	8	16	7	16	9	15	9	15	13	16	10	15	8	11	7	16	17	6	5	9	15	8	15	8	8	15	6	7	3	6	2	7	10	5	3	...	1	4	7	9	13	202	8.4
" 3,	8	12	8	8	9	10	8	10	7	7	8	11	8	12	8	9	14	6	30	4	2	5	12	5	16	10	15	12	16	8	15	6	15	9	13	4	10	5	12	5	6	5	10	12	8	10	8	8	193	8.0
" 4,	7	6	15	10	15	9	15	6	15	6	18	6	23	8	9	5	29	5	32	4	4	3	4	8	9	4	14	6	15	7	16	6	17	8	16	8	15	5	15	3	15	4	10	5	7	3	7	4	134	5.6
" 5,	12	9	...	1	4	3	4	3	4	3	4	3	4	2	6	3	9	3	9	10	9	14	8	15	8	16	8	12	9	14	7	12	8	10	10	4	9	2	...	1	8	2	...	0	8	4	8	2	148	6.2
" 6,	8	2	8	2	8	3	8	3	4	13	4	16	4	18	4	20	5	20	5	22	4	20	4	23	6	26	6	28	7	27	7	30	8	30	7	30	8	34	8	34	9	38	8	35	515	21.5
" 7,	8	35	8	31	9	39	8	39	8	38	8	38	8	39	8	39	8	37	7	30	7	36	7	38	7	39	12	38	12	37	10	33	9	29	9	32	9	35	8	24	8	26	9	33	10	35	11	40	840	35.0
" 8,	11	42	11	41	11	37	11	38	11	40	11	38	11	36	11	34	11	30	10	37	10	38	10	39	9	37	9	35	10	30	10	30	10	27	11	28	11	26	11	29	10	30	9	29	9	27	10	22	815	34.0
" 9,	10	20	11	20	11	16	8	19	8	20	8	24	9	23	9	27	10	27	10	28	8	25	9	26	9	22	9	23	10	22	9	17	9	16	9	14	8	15	8	11	10	5	8	2	8	2	...	0	424	17.7
" 10,	...	1	11	2	11	2	11	2	...	0	...	1	10	4	7	4	4	7	15	6	24	18	23	16	15	10	15	8	19	5	29	2	30	4	30	6	30	4	8	8	8	9	10	6	9	2	124	5.2
" 11,	...	1	32	3	32	2	...	1	32	2	29	6	26	7	26	7	26	7	24	8	24	16	24	17	25	15	23	13	23	10	24	13	24	13	24	10	24	7	...	1	26	4	24	8	25	11	25	10	192	8.0
" 12,	25	9	25	10	25	10	25	14	25	13	28	11	27	10	25	10	21	11	24	12	20	14	20	26	19	29	19	33	20	35	19	29	19	22	19	14	20	9	18	10	19	14	20	17	20	12	21	15	389	16.2
" 13,	20	12	19	16	19	16	19	22	18	20	18	19	20	16	17	20	18	19	20	18	20	20	20	15	19	15	17	14	17	10	16	9	16	12	16	8	16	8	16	10	15	8	15	7	16	10	15	6	330	13.8
" 14,	16	6	12	5	16	8	16	6	16	5	18	3	17	6	16	2	16	6	15	6	16	16	16	18	14	16	13	16	13	16	12	15	9	15	8	14	7	11	6	11	8	6	3	6	3	...	1	...	169	7.0
" 15,	...	0	6	3	6	4	6	2	...	1	...	1	...	1	6	2	6	2	6	2	6	5	25	8	21	7	24	9	24	9	26	7	26	6	26	6	27	3	16	4	16	3	16	2	...	0	16	2	22	3	90	3.7
" 16,	28	3	28	2	28	2	...	1	18	2	...	1	22	2	27	3	27	5	26	7	25	10	24	18	25	10	26	8	25	8	24	6	16	4	...	1	...	0	...	1	...	1	...	1	...	0	...	0	91	3.8
" 17,	...	0	...	1	...	0	...	0	10	2	10	2	32	2	31	5	23	7	24	8	25	7	13	7	16	5	28	8	29	8	29	8	29	4	...	1	...	0	...	1	...	1	4	11	4	11	7	65	3.5
" 18,	9	8	9	8	9	6	9	4	9	5	9	3	7	3	11	5	10	10	8	14	8	13	14	8	14	8	9	8	11	8	7	11	6	10	6	5	6	5	9	5	5	4	5	2	...	0	...	0	153	6.4
" 19,	...	0	...	1	30	3	30	3	30	2	30	3	30	4	28	6	25	9	25	8	24	10	24	10	23	12	21	12	22	12	21	14	20	13	20	9	20	7	19	8	19	12	20	15	20	21	21	21	215	9.0
" 20,	20	21	20	23	21	24	20	23	21	20	21	21	25	10	26	7	24	10	27	16	24	16	23	10	23	10	21	10	20	8	19	11	18	10	21	14	21	18	19	15	20	7	21	4	23	9	25	4	321	13.4
" 21,	25	5	24	7	27	8	25	9	23	21	20	21	19	8	32	13	27	4	25	5	23	3	19	3	26	6	25	7	25	9	27	10	23	12	22	10	23	8	27	8	29	6	29	6	29	7	29	5	207	8.6
" 22,	29	2	29	3	29	2	29	5	24	4	24	4	23	12	24	11	27	9	27	10	24	14	24	12	25	6	16	9	17	10	16	10	17	9	18	8	18	6	18	5	18	10	20	7	18	9	18	9	189	7.9
" 23,	18	14	18	15	19	13	20	16	20	17	20	16	19	13	19	8	16	8	20	6	17	9	16	12	17	11	16	13	17	11	16	15	16	11	17	12	16	10	16	10	16	10	16	9	15	10	276	11.5
" 24,	15	14	15	14	14	13	16	12	16	12	22	10	12	8	6	4	14	4	4	4	6	5	8	8	14	6	7	6	7	10	7	9	7	9	7	9	8	9	14	3	14	9	7	12	8	15	7	8	218	8.9
" 25,	14	11	15	11	14	13	15	12	16	18	16	10	20	5	2	4	12	6	17	10	17	10	31	7	22	5	25	2	2	2	87	2	28	2	6	4	8	15	8	15	8	12	5	7	7	7	8	206	8.6
" 26,	7	6	7	5	5	4	3	3	5	4	7	10	6	8	8	12	8	12	8	15	7	16	8	16	7	14	8	17	8	21	13	15	8	17	9	13	9	9	9	6	9	8	9	9	9	15	9	15	270	11.2
" 27,	8	12	8	11	8	10	8	6	8	4	8	2	8	2	12	2	16	2	25	5	25	5	24	10	24	10	24	10	25	10	24	9	26	6	27	4	27	2	6	6	13	8	9	10	6	10	2	159	6.6
" 28,	10	3	6	3	30	6	22	4	12	4	...	1	8	4	...	1	8	4	9	18	9	18	12	8	10	10	9	20	8	26	7	19	6	25	6	36	6	36	6	48	6	47	5	42	6	47	6	48	473	19.7
" 29,	6	52	6	50	6	49	6	47	6	49	6	54	7	50	7	47	7	40	6	42	6	49	8	53	8	51	8	47	8	49	7	48	7	47	7	47	8	53	9	55	8	54	9	49	9	46	8	45	1173	48.9
" 30,	8	43	7	41	8	45	8	49	9	50	9	51	9	44	10	45	9	47	10	49	10	54	10	44	9	44	9	45	10	42	9	43	9	45	10	44	10	39	10	40	10	38	10	40	9	39	10	36	1057	44.0
" 31,	10	35	10	35	10	30	12	31	10	35	10	29	11	34	10	32	10	31	9	31	9	38	9	35	9	36	9	31	8	32	8	28	8	29	8	28	9	27	9	27	10	22	11	22	10	19	10	15	712	29.7
Sums,	...	412	...	407	...	418	...	423	...	444	...	434	...	403	...	412	...	411	...	446	...	519	...	619	...	508	...	517	...	511	...	471	...	476	...	419	...	413	...	407	...	414	...	414	...	437	...	401	10611	442.2
Hourly Means,	...	13.3	...	13.1	...	13.5	...	13.6	...	14.3	...	14.0	...	13.1	...	13.3	...	13.2	...	14.4	...	16.8	...	16.7	...	16.4	...	16.7	...	16.5	...	15.2	...	14.7	...	13.5	...	13.3	...	13.1	...	13.4	...	13.4	...	14.1	...	12.9	342.3	14.3

TABLE VIII.

EAN HOURLY COMPONENTS AND MEAN DIRECTION OF THE WIND, FOR JULY, 1884.

our.	Components (miles per hour).						Direction.
	N	E	S	W	+N-S	+E-W	
1 a.	0.7	8.3	4.5	2.1	— 3.8	+ 6.2	E 32° S
2 „	0.8	7.5	5.0	2.1	— 4.2	+ 5.4	E 38° S
3 „	1.4	7.6	4.8	2.4	— 3.4	+ 5.2	E 33° S
4 „	0.9	7.3	5.0	3.0	— 4.1	+ 4.3	E 44° S
5 „	1.1	7.8	4.9	2.7	— 3.8	+ 5.1	E 36° S
6 „	1.5	8.1	4.0	2.9	— 2.5	+ 5.2	E 25° S
7 „	1.2	8.1	3.2	2.6	— 2.0	+ 5.5	E 20° S
8 „	2.0	8.4	3.2	1.5	— 1.2	+ 6.9	E 10° S
9 „	1.0	8.3	3.4	2.4	— 2.4	+ 5.9	E 22° S
10 „	2.1	8.6	2.9	3.1	— 0.8	+ 5.5	E 8° S
11 „	1.3	9.9	3.3	4.0	— 2.0	+ 5.9	E 18° S
Noon.	0.8	9.5	4.4	3.9	— 3.6	+ 5.6	E 32° S
1 p.	0.6	9.5	3.1	4.4	— 2.5	+ 5.1	E 27° S
2 „	0.8	9.8	4.8	3.0	— 4.0	+ 6.8	E 30° S
3 „	0.6	9.7	5.5	2.9	— 4.9	+ 6.8	E 36° S
4 „	0.8	9.4	4.3	2.7	— 3.5	+ 6.7	E 27° S
5 „	0.7	9.4	3.6	2.3	— 2.9	+ 7.1	E 22° S
6 „	0.8	9.1	3.7	1.7	— 2.9	+ 7.4	E 22° S
7 „	0.7	9.4	3.3	1.5	— 2.6	+ 7.9	E 18° S
8 „	0.9	9.4	3.4	1.0	— 2.5	+ 8.4	E 17° S
9 „	0.9	9.5	3.5	1.2	— 2.6	+ 8.3	E 17° S
10 „	1.3	9.6	2.9	1.6	— 1.6	+ 8.0	E 12° S
11 „	0.9	10.1	3.0	2.1	— 2.1	+ 8.0	E 15° S
Mid.	0.7	9.0	3.7	1.7	— 3.0	+ 7.3	E 23° S
Mean,.....	1.0	8.9	3.9	2.5	— 2.9	+ 6.4	E 24° S

TABLE IX.

IRECTION AND FORCE OF THE WIND, AT VICTORIA PEAK, AND SEA DISTURBANCE.

Date.	4 a.			10 a.			4 p.			10 p.		
	Direction	Force.	Sea.	Direction	Force.	Sea.	Direction	Force.	Sea.	Direction	Force.	Sea.
1884.												
1,.....	...	...	2	S	5	2	S	3	1	S	4	2
2,.....	...	...	0	S	4	0	S	3	0	S	4	0
3,.....	...	...	0	S	4	0	S	4	2	S	3	1
4,.....	...	...	0	S	3	1	S	3	1	S	3	2
5,.....	...	...	1	S	2	0	S	2	0	S	2	0
6,.....	...	...	3	E	5	4	E	5	5	E	5	5
7,.....	...	...	5	E	6	6	ESE	6	5	ESE	6	4
8,.....	...	...	5	E	6	5	ESE	5	4	ESE	4	4
9,.....	...	...	4	ESE	5	4	ESE	4	3	E	2	3
10,.....	...	...	2	ENE	3	2	SSW	2	2	SSW	2	2
11,.....	...	...	2	WSW	3	2	WSW	4	2	WSW	4	2
12,.....	...	...	3	W	4	4	SW	6	4	SW	6	4
13,.....	...	...	2	SSW	5	2	S	5	2	S	5	3
14,.....	...	...	2	S	2	2	S	4	0	S	3	0
15,.....	...	...	0	S	1	0	S	2	0	SW	2	0
16,.....	...	...	0	S	1	0	S	2	0	S	2	0
17,.....	...	...	0	S	1	0	S	3	0	S	2	0
18,.....	...	...	0	ENE	2	0	SE	2	0	SE	2	0
19,.....	...	...	2	SW	3	2	SW	4	2	SW	5	2
20,.....	...	...	3	SW	4	2	SW	4	2	SW	4	3
21,.....	...	...	2	WNW	3	3	W	3	2	SW	4	3
22,.....	...	...	4	SW	3	3	SW	4	3	SW	5	4
23,.....	...	...	3	S	4	2	S	4	3	S	5	3
24,.....	...	...	3	S	4	2	S	4	0	S	4	0
25,.....	...	...	2	S	5	3	S	4	0	S	4	0
26,.....	...	...	0	S	3	0	SSE	4	0	SE	4	0
27,.....	...	...	0	SE	2	0	WNW	2	0	NW	1	0
28,.....	...	...	2	ENE	3	3	E	4	4	E	6	7
29,.....	...	...	6	E	7	7	E	7	7	E	6	6
30,.....	...	...	6	ESE	6	6	SE	6	6	SE	6	6
31,.....	...	...	5	SE	5	5	ESE	5	4	SE	5	4
Mean,.....	...	...	2.2	E 68° S	3.7	2.3	E 76° S	3.9	2.1	E 78° S	3.9	2.3

TABLE X.

AMOUNT AND CLASSIFICATION OF CLOUDS AND DIRECTION WHENCE COMING.

Date.	4 a.			10 a.			4 p.			10 p.		
	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Dir
1884.												
July 1, ...	9	nim.	S	9	cum.	SW	9	cum-str.	SW	9	cum-str.	S
„ 2, ...	3	cum.	SSE	10	nim.	SSW	10	nim.	...	10	str.	S
„ 3, ...	9	cum-nim.	SW	10	nim.	SW	8	c-cum. / cum-str.	NNE / SW	10	nim.	S
„ 4, ...	2	cum.	SE	10	nim.	SW	9	c-cum. / cum-str.	NE / SSW	7	c-cum. / cum.	
„ 5, ...	9	nim.	...	6	c-cum. / cum.	NE / SE	5	c-cum. / cum.	KNE / ESE	2	c-str. / sm-cum.	
„ 6, ...	0	...	...	10	c-cum. / R-cum.	E	10	nim.	E	10	sm-cum. / nim.	
„ 7, ...	8	nim.	E	10	R-cum.	ESE	10	nim.	...	10	cum-nim.	E
„ 8, ...	6	cum.	ESE	7	cum.	SE	9	c-cum. / cum.	ENE / SE	7	c-cum. / cum.	
„ 9, ...	6	cum.	E	7	c-cum. / cum.	ESE	7	c-cum. / cum.	NE / E	7	c-str. / sm-cum.	
„ 10, ...	1	c-cum.	N	6	c-cum. / cum.	NNE / NE	5	c-cum. / nim.	NNE / N	8	c-cum. / cum.	
„ 11, ...	2	c-cum. / cum.	W / NE	2	c. / cum.	WSW / NW	3	c-cum. / cum.	NNE	7	c-cum.	
„ 12, ...	1	c-str. / cum.	SW	10	c-str. / cum.	NW / —	7	sm-cum. / c-str.	WNW / SW	10	str. / R-cum.	
„ 13, ...	9	c-cum. / cum.	SW	10	R-cum.	SW	7	c-cum. / cum.	E / SW	5	cum.	S
„ 14, ...	5	c-cum. / cum.	SSW	7	c. / cum.	SE	3	cum.	SE	1	sm-cum.	
„ 15, ...	3	c.	NNE	3	c-str. / cum.	ENE / SSE	3	c-str. / cum.	E / WNW	1	cum.	
„ 16, ...	3	c-cum.	ENE	5	c-cum. / cum.	E / ENE	5	c-str. / cum.	E / SE	5	c-str. / cum.	
„ 17, ...	8	c-cum.	ENE	9	nim. / cum-str.	E / SW	6	c-cum. / cum-str.	NE / SE	9	cum-str.	W
„ 18, ...	2	cum.	ENE	8	nim. / nim.	ENE / NNW	8	cum. / nim.	ENE / NNW	3	cum.	N
„ 19, ...	0	...	...	2	cum.	W	2	cum.	W	5	cum-str.	
„ 20, ...	6	nim.	SSW	10	c-str. / cum.	NW	7	c-str. / cum-str.	E / WNW	3	cum.	W
„ 21, ...	8	cum.	W	10	nim.	NNW	7	c-cum. / cum.	SE / W	4	cum.	
„ 22, ...	0	...	...	3	c-cum. / cum.	E / W	5	c-cum. / cum.	NE / SSW	4	cum.	
„ 23, ...	4	cum.	SW	7	c-cum. / cum.	NE / SW	7	c-cum. / cum.	ENE / SSW	8	cum.	
„ 24, ...	0	...	...	10	nim.	WSW	10	nim.	SSW	10	nim.	
„ 25, ...	7	cum-nim.	SW	10	str. / nim.	SW	10	nim.	SSW	5	cum.	
„ 26, ...	3	cum-nim.	SE	8	c-cum. / R-cum.	N / SE	7	c-cum. / cum.	NE / ESE	4	cum-nim.	
„ 27, ...	1	c-cum.	NNE	2	c-cum. / cum.	NNE / WSW	1	c-cum. / sm-cum.	NNW / WNW	0	...	
„ 28, ...	1	c-cum.	E	7	c-cum. / cum.	E / NE	10	cum-nim. / cum.	NE / ENE	5	sm-cum. / cum-nim.	
„ 29, ...	3	nim.	E	7	R-cum.	E	10	cum-nim. / cum.	E / ESE	10	cum-nim.	
„ 30, ...	7	nim.	E	9	cum-nim.	ESE	8	cum-nim.	ESE	10	cum-nim.	
„ 31, ...	10	nim.	ESE	9	sm-cum. / R-cum.	ESE / ESE	8	c-cum. / R-cum.	NE / ESE	3	cum.	
Mean, ...	4.4	...	...	7.5	...	...	7.0	...	...	6.2	...	

TABLE XI.
VICTORIA PEAK.

ATE.	BAROMETER.			TEMPERATURE.						
	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.	Sun.	Max.	Min.	Rad.
	ins.	ins.	ins.	°	°	°	°	°	°	°
84.	27.928	27.893	27.920	74.8	73.8	74.2	131.4	77.9	72.0	72.3
1,.....	28.017	27.986	27.990	75.0	72.4	72.2	106.0	75.1	70.0	69.9
2,.....	28.045	28.013	28.014	73.8	75.8	73.8	131.0	75.9	71.0	70.5
3,.....	28.094	28.028	28.062	74.4	73.8	73.8	121.0	76.1	70.0	69.9
4,.....	28.057	27.984	27.999	74.8	75.8	74.0	138.0	77.7	70.0	71.5
5,.....	27.909	27.853	27.881	73.6	73.2	73.0	106.0	74.1	72.0	72.5
6,.....	27.837	27.819	27.871	73.2	71.0	72.8	114.0	74.9	70.0	69.5
7,.....	27.985	27.980	28.047	74.8	74.6	73.8	132.0	75.7	72.0	73.5
8,.....	28.051	28.013	28.032	75.4	75.0	73.8	140.0	76.9	72.2	73.5
9,.....	27.980	27.892	27.925	76.8	75.0	73.8	151.0	78.5	72.0	68.5
10,.....	27.850	27.757	27.757	75.8	80.8	77.2	140.0	80.9	72.8	71.5
11,.....	27.765	27.750	27.784	77.4	75.0	74.8	135.0	78.3	74.0	74.5
12,.....	27.875	27.858	27.868	74.0	73.8	75.2	122.0	76.7	72.0	73.3
13,.....	27.938	27.905	27.945	75.0	75.8	74.6	142.0	76.9	73.0	72.5
14,.....	27.955	27.887	27.924	75.0	78.6	75.4	140.0	78.7	72.0	71.5
15,.....	27.921	27.863	27.861	76.6	77.0	75.8	146.0	77.9	73.0	73.5
16,.....	27.878	27.830	27.876	75.0	74.8	74.8	131.0	78.9	72.0	72.5
17,.....	27.871	27.834	27.895	77.4	75.8	74.8	148.0	77.5	73.0	72.5
18,.....	27.874	27.811	27.846	76.2	77.4	75.8	143.0	80.1	73.4	71.5
19,.....	27.845	27.781	27.767	76.8	77.8	76.8	139.0	79.9	74.6	72.5
20,.....	27.775	27.725	27.749	75.8	77.4	76.8	132.0	78.9	72.2	69.5
21,.....	27.782	27.761	27.831	76.0	77.0	76.8	142.0	79.9	74.0	73.5
22,.....	27.870	27.869	27.869	75.8	76.6	74.8	140.0	76.9	74.0	74.5
23,.....	27.927	27.916	27.887	73.2	73.8	73.2	90.0	75.9	71.0	70.5
24,.....	27.958	27.915	27.934	74.8	73.8	74.8	92.0	77.1	71.0	71.5
25,.....	27.954	27.928	27.969	75.4	74.8	73.8	145.2	76.9	73.0	72.5
26,.....	27.950	27.905	27.916	75.6	78.8	74.8	139.0	79.5	72.2	70.5
27,.....	27.835	27.788	27.808	77.8	75.8	71.8	150.0	80.1	71.8	72.5
28,.....	27.772	27.716	27.815	72.6	73.6	72.8	117.0	74.9	71.0	70.5
29,.....	27.853	27.837	27.919	73.2	74.2	72.8	127.8	74.9	72.0	72.5
30,.....	27.953	27.940	27.984	72.8	72.8	71.8	134.2	74.9	71.0	70.5
31,.....										
Mean,.....	27.913	27.872	27.901	75.1	75.3	74.3	131.1	77.4	72.1	71.8

TABLE XII.
TEMPERATURE.

DATE.	CAPE D'AGUILAR.					
	4 a.	10 a.	4 p.	10 p.	MAX.	MIN.
	°	°	°	°	°	°
1884.						
1,.....	75.6	83.6	82.1	80.9	84.8	75.6
2,.....	80.9	80.6	74.6	75.1	83.8	74.6
3,.....	76.9	81.8	83.0	81.1	84.8	76.8
4,.....	80.4	80.6	84.8	80.6	85.5	77.6
5,.....	80.1	87.1	86.6	80.6	87.7	79.6
6,.....	80.9	80.6	80.4	80.6	82.0	76.6
7,.....	80.6	81.6	75.6	78.8	82.3	75.6
8,.....	80.2	82.6	80.6	80.6	83.8	78.6
9,.....	79.8	82.6	82.6	80.0	84.6	79.6
10,.....	80.6	85.1	84.6	78.0	87.2	78.0
11,.....	78.4	85.1	85.6	82.1	88.8	78.4
12,.....	81.9	84.6	82.6	81.4	87.8	81.4
13,.....	80.4	82.6	84.4	82.1	86.6	80.4
14,.....	80.3	85.6	84.4	80.6	86.8	79.8
15,.....	78.4	86.6	86.6	81.1	88.1	78.4
16,.....	79.6	85.4	86.6	82.1	89.8	79.6
17,.....	80.2	85.6	85.6	82.1	88.0	80.2
18,.....	80.1	86.6	84.6	81.6	89.8	79.6
19,.....	79.6	87.1	88.8	82.6	91.3	79.6
20,.....	82.8	86.6	87.6	82.9	89.8	81.3
21,.....	83.1	78.6	83.8	82.1	86.4	76.8
22,.....	80.6	86.1	84.8	80.6	87.8	80.6
23,.....	80.6	85.6	84.6	78.6	87.2	78.6
24,.....	81.6	76.6	76.1	74.6	82.3	74.6
25,.....	80.1	79.6	81.6	77.1	81.8	75.0
26,.....	78.1	81.9	81.6	81.8	83.3	76.6
27,.....	79.4	82.8	85.0	79.1	85.8	79.1
28,.....	77.6	82.6	80.1	79.6	83.8	75.6
29,.....	77.9	80.1	79.6	80.1	82.0	73.6
30,.....	80.0	82.1	80.6	77.6	82.1	77.6
31,.....	78.3	82.1	80.6	77.6	82.8	76.6
Mean, ...	79.8	83.2	82.9	80.1	85.8	77.9

TABLE XIII.

RELATIVE HUMIDITY.

Date.	Observatory.			Cape d'Aguilar.				Victoria Peak.		
	10 a.	4 p.	10 p.	4 a.	10 a.	4 p.	10 p.	10 a.	4 p.	10
1884.										
July 1,	85	81	88	100	89	91	96	99	99	
" 2,	78	95	93	95	93	100	100	99	96	
" 3,	90	74	88	95	92	91	96	99	95	
" 4,	87	77	89	93	93	88	89	99	95	
" 5,	78	71	89	94	88	82	80	99	95	
" 6,	75	83	82	90	93	97	93	95	99	
" 7,	76	87	89	89	93	100	96	93	99	
" 8,	84	81	87	99	91	100	95	92	94	
" 9,	78	67	89	95	93	81	88	83	89	
" 10,	68	76	91	89	79	77	91	86	94	
" 11,	83	71	85	88	79	78	91	95	89	
" 12,	65	71	83	83	85	89	86	75	95	
" 13,	73	66	85	89	85	80	91	98	99	
" 14,	77	59	83	89	78	77	85	94	91	
" 15,	70	58	83	89	78	74	79	92	87	
" 16,	73	66	85	89	78	78	83	94	86	
" 17,	75	78	88	89	79	78	80	95	95	
" 18,	76	77	82	91	74	77	81	92	95	
" 19,	77	67	81	92	72	77	89	97	94	
" 20,	75	68	77	90	82	80	91	95	91	
" 21,	96	74	93	96	84	90	95	94	97	
" 22,	76	70	83	93	84	88	99	94	99	
" 23,	76	73	86	93	89	89	93	95	93	
" 24,	93	95	93	90	98	100	100	99	98	
" 25,	87	92	95	91	100	93	95	99	99	
" 26,	83	79	91	99	91	91	92	88	91	
" 27,	70	61	87	90	88	83	91	88	77	
" 28,	76	82	74	89	89	97	85	70	95	
" 29,	75	73	85	91	82	91	89	95	90	
" 30,	85	80	90	93	87	89	95	94	94	
" 31,	81	72	82	95	87	85	95	97	90	
Mean,	79	75	86	92	86	87	91	93	94	

TABLE XIV.

TENSION OF AQUEOUS VAPOUR EXPRESSED IN INCHES OF MERCURY.

Date.	Observatory.			Victoria Peak.		
	10 a.	4 p.	10 p.	10 a.	4 p.	10 p
1884.						
July 1,	0.997	0.958	0.958	0.860	0.824	0.7
" 2,	0.924	0.859	0.864	0.858	0.769	0.8
" 3,	0.927	0.992	0.914	0.832	0.847	0.8
" 4,	0.952	0.957	0.925	0.849	0.799	0.7
" 5,	0.974	0.937	0.924	0.853	0.847	0.7
" 6,	0.877	0.896	0.855	0.794	0.807	0.8
" 7,	0.827	0.832	0.868	0.759	0.757	0.7
" 8,	0.916	0.925	0.909	0.794	0.805	0.8
" 9,	0.895	0.914	0.921	0.731	0.777	0.7
" 10,	0.827	0.918	0.905	0.794	0.817	0.8
" 11,	0.935	0.950	0.991	0.855	0.939	0.8
" 12,	0.807	0.873	0.913	0.706	0.824	0.8
" 13,	0.844	0.949	0.924	0.821	0.832	0.8
" 14,	0.921	0.897	0.893	0.817	0.807	0.8
" 15,	0.849	0.823	0.913	0.799	0.853	0.7
" 16,	0.847	0.900	0.955	0.863	0.807	0.8
" 17,	0.895	0.922	0.934	0.832	0.819	0.8
" 18,	0.941	0.931	0.869	0.868	0.847	0.8
" 19,	0.922	0.976	0.982	0.875	0.886	0.8
" 20,	0.931	1.000	0.925	0.876	0.864	0.8
" 21,	0.887	0.987	1.014	0.840	0.911	0.8
" 22,	0.904	1.026	0.970	0.845	0.917	0.8
" 23,	0.950	0.965	0.948	0.847	0.854	0.8
" 24,	0.909	0.913	0.817	0.815	0.815	0.8
" 25,	0.931	0.931	0.906	0.860	0.832	0.8
" 26,	0.918	0.871	0.912	0.779	0.779	0.8
" 27,	0.807	0.821	0.895	0.785	0.761	0.8
" 28,	0.942	0.932	0.799	0.663	0.847	0.8
" 29,	0.828	0.820	0.856	0.767	0.754	0.7
" 30,	0.896	0.906	0.899	0.767	0.794	0.7
" 31,	0.900	0.833	0.833	0.780	0.726	0.7
Mean,	0.899	0.917	0.909	0.812	0.823	0.8

TABLE XV.

RAINFALL AT DIFFERENT STATIONS.

ATE.	Observatory.		Stone Cutters' Island.	Victoria Peak.
	Amount.	Duration.	Amount.	Amount.
	ins.	hrs.	ins.	ins.
884.	0.200	2	0.30	0.26
1,.....	1.490	8	1.31	1.15
2,.....	0.500	3	0.30	0.45
3,.....	0.045	2	0.14	0.16
4,.....	0.020	1	0.04	...
5,.....	0.200	12	0.45	0.35
6,.....	1.040	8	0.91	0.60
7,.....	0.150	2	0.07	0.20
8,.....	...	0	...	...
9,.....	0.110	1	0.08	...
10,.....	...	0	...	...
11,.....	...	0	...	...
12,.....	0.010	1	0.02	0.30
13,.....	...	0	...	...
14,.....	...	0	...	...
15,.....	...	0	...	...
16,.....	0.275	2	0.23	1.20
17,.....	0.095	1	...	...
18,.....	...	0	...	...
19,.....	3.710	4	6.87	4.80
20,.....	...	0	...	...
21,.....	...	0	...	...
22,.....	0.775	5	0.60	0.44
23,.....	1.800	11	1.20	2.41
24,.....	0.400	5	0.24	0.35
25,.....	0.020	1	0.01	...
26,.....	...	0	...	...
27,.....	0.065	1	0.27	0.48
28,.....	0.550	5	0.86	0.40
29,.....	0.690	5	...	0.45
30,.....	0.010	1	...	...
31,.....				
otal,.....	12.155	81	13.90	14.00

W. Doberck,
Government Astronomer.

gkong Observatory, 28th November, 1884.

HONGKONG OBSERVATORY.

Weather Report for August, 1884.

In the *China Coast Meteorological Register*, based on information transmitted by the Great Northern and the Eastern Extension Telegraph Companies—which I have published daily, is given a summary of the atmospheric circumstances in Manila and along the Coast of China between Haiphong and Shanghai. It also contains information concerning the weather in Nagasaki and Wladivostock.

The barometer reached its highest reading after the passage of Typhoon V. in Manila on the 30th July and in Hongkong on the 1st August. On the latter day a light N breeze, backing next day to NW, blew over Luzon. The sky was overcast and rain fell. Southeast of Luzon the weather was bad but there was not much wind. Upper clouds from ENE were observed in Hongkong on the 2nd. They backed to NNE on the 3rd. At 10 a. on the 2nd I issued the following notice:—'There appears to be another Typhoon far off in the East.' The center of Typhoon VI appears to have been at that time situated in 15° N, 127° E and to have been moving from SE to NW, but for want of observations its position cannot be properly determined. The barometer fell to 29.60 at 4 p. on the 3rd in Manila,—the lowest reading reported from that station. A moderate SW breeze was blowing at the time and the wet weather continued. At 10 a. on the 5th the center appears to have been moving straight northwards. Its position may have been about 22° N and 125° E. The S. S. *Thibet* on the morning of that day experienced a head swell and at noon in 28° 5′ N and 125° 49′ E a moderate N gale, which increased to a fresh NE gale with hard squalls and a high sea during the following night. The barometer had fallen 0.2 inches since noon on the previous day and appearances to eastward were threatening. At 10 a. on the 6th the center was perhaps in about 24½° N and 125° E. I notified that:—'the Typhoon appeared to have taken a northerly course.' The lowest reading of the barometer in Hongkong was not reached till that day, but it is not impossible that the depression was getting deeper as it proceeded. At the same time the temperature reached its maximum here and clouds came up from WNW. Fine weather and light winds continued without interruption over China and in the China Sea. No rain fell in Hongkong till the 8th. But on the 6th and the 7th strong NE breezes were felt over Formosa and on the latter day a moderate NNE gale with high sea and heavy swell was felt in the northern entrance to the Formosa Straits. At the same time a strong NNW breeze is reported from Tamsui with overcast weather and passing showers. At Takow a strong WNW breeze on the 6th increased to a NNW gale on the 8th. But this was not felt at neighbouring stations. On the whole the distribution of fresh winds during this Typhoon seems to have been very unequal. The fall in the barometer did not much exceed 0.1 inches at any of these stations. At 10 a. on the 7th the center of the Typhoon may have been in 26° N and 126° E. I gave notice:—'that the Typhoon appeared to have recurved and returned to the Pacific in about the latitude of Northern Formosa.' On the 8th, light SW breezes were felt over the China Sea and along the coast. At 10 a. the center was in about 28° N and 127° E. On the 9th the barometer was falling slightly in Shanghai and a moderate NE breeze was felt in the afternoon. At 10 a. on the 10th the center appears to have been in 30° 25′ N and 128° 12′ E. The barometer was falling over SW Japan and stormwarnings were issued from the Observatory in Tokio. At 2 p. Mr. KNIPPING wrote:—'A depression is off S. Kiushiu.' At 3 p. an E gale blew in Kagoshima, where the barometer fell to 29.24 at 9 p. That evening the weather was rainy in SW Japan but fine at all eastern stations. The 11th at 6 a. the barometer had fallen to 29.13″ in Nagasaki, where a N gale was blowing. South of Hiogo the S. S. *Volga* met squally weather. In Nagasaki at 2 p. 3.74 inches of rain had fallen and the temperature fell about ten degrees. At 9 p. the center appears to have been in 32° 45′ N and 132° 12′ E. At 10 p. in the evening the S. S. *Volga* in about 33° N and 134½° E encountered a whole gale from SE, which veered to SW next morning. The rain was not heavy but the sea was higher than was to be expected from the force of the wind. At 6 a. on the 12th the center was in 33° 0′ N and 132° 55′ E, the lowest reading was 29.21 inches. The wind was nowhere strong although in Osaka it blew a gale from the East. The center was moving slowly eastward. At 2 p. it was in 33° 26′ N and 134° 0′ E and at 9 p. in 34° 0′ N and 135° 50′ E. The depression was beginning to fill up but the wind had increased to a heavy NE gale in Osaka. At 6 a. on the 13th it was in 34° 10′ N and 137° 30′ E and strong E winds were felt in southern Nippon. At 2 p. it was in 34° N and 139° E and the weather was then clearing in the west but rainy in the east. In the evening of the 13th the depression passed the SE coast.

Meantime the barometer had been rising over Southern China and the Philippines. On the 11th it began to fall and upper clouds came up over Hongkong from SE. At 11 a. I gave notice 'that a typhoon would probably soon be formed and that it would most likely take a Northern course.' A moderate SW veering to NW breeze was reported from Luzon on that day. The weather was squally and wet and continued so for a couple of days. The lowest barometer was reported at 4 p. on the 12th, accompanied by a moderate breeze from WSW. The direction of the upper current over Hongkong backed to NNE on the 13th: at S. Cape the barometer was lowest on the 13th. It had fallen nearly a tenth of an inch in two days. The weather was warm and close but cleared up on the following day. Fine weather and smooth seas prevailed over the China Sea. It appears that Typhoon VII had passed far to the East, perhaps at no time less than 900 miles distant, but its track cannot be laid down, so much more as I have not been able to trace it to Japan.

In Hongkong the barometer was rising between the 14th and the 19th, but the rise was interrupted by a slight fall, also registered at S. Cape (Formosa), on the 17th. The weather continued overcast with gentle S and SW winds, which blew over the China Sea, the Philippines, and Southern Formosa. In Manila the barometer began to fall on the 15th, the lowest reading 29.65 being reported at 4 p. on the 17th. At 10 a. on the 16th the wind veered to NW in Manila, and I notified, that 'it was not impossible, that there was another depression in the far East,' and in the evening of the 17th, that it had approached Manila. At 4 p. on the 16th a light Easterly breeze and squally weather had been reported from there, and at 10 a. on the 17th a gentle NE breeze with overcast and rainy weather. The wind appears to have veered to East in the afternoon and the sky was clear next morning. Typhoon VIII appears therefore to have passed south of Manila and to have disappeared moving towards W. The strong NW squalls veering to NE with very heavy rains, and a confused sea with heavy swell from E, that were encountered by the S. S. *Glenogle* on or about the 19th in 10° to 13° N and about 114° E, were apparently caused by this typhoon.

On the morning of the 18th the sky cleared in Manila and in the afternoon in Hongkong. The barometer began to fall over Luzon the same day and along the Southern Coast of China as well as over Southern Formosa on the following day. At 10 a. on the 18th the center of Typhoon IX appears to have been in about 12° N and 126° E. Gentle E breezes blew over Luzon and Southern Formosa. It was moving towards NW and its position at 10 a. on the 19th was about 14° 10′ N and 124° 10′ E. A very light NNW breeze was reported from Manila. Light E breezes blew along the Southern Coast of China. At S. Cape a moderate ENE breeze and detached clouds were observed. In Northern China the weather was overcast owing to a depression, whose center was in Shantung, where the barometer had fallen one or two tenths of an inch. It came from the W and passed off to Japan. The winds did not exceed fresh breezes.—No doubt the existence of this depression influenced the course of Typhoon IX. It is known from the researches of European and American meteorologists, that atmospheric depressions are attracted towards areas, where the wind is light and the barometer low, and especially towards places which have just been traversed by a previous depression.—circumstances in such places being particularly favourable for the support of a fresh disturbance, no doubt owing to the richness of water vapour from the previous fall of rain.

At 10 a. on the 20th the center appears to have been in 15° 55′ N and 121° 22′ E. Now the winds were much stronger, a part of the disturbance having reached the China Sea. The height of the barometer in Manila was 29.61 and a fresh WSW gale was reported,—it fell to 29.39 at 4 p. with a strong SW gale.—the weather was overcast and gloomy and over one inch of rain was reported during the day. A strong N gale blew to the northwest of Luzon. Over China the weather continued fine with detached clouds. The sky had cleared and the barometer had risen in the north. It had fallen a couple of hundredths of an inch in the south. Light breezes from different directions blew except at S. Cape, where the wind had increased and the air had become misty in the morning. Already at 10 a. there blew a moderate NE gale.

At 10 a. on the 21st the center was is 19° 55′ N and 118° 15′ E. The gale had veered and reached SSW to the northwest of Luzon. On the SE coast of China the barometer had fallen about two tenths since previous morning. Moderate NE breezes blew, and the sky was overcast. Upper clouds from E were observed in Hongkong. The barometer had fallen about a tenth in Touquin, where the weather was fine, and had risen two tenths in Manila, where the sky was clearing with a gentle S breeze. At S. Cape it was raining, the barometer had fallen two tenths of an inch and the moderate NE gale continued. Bad weather was of course encountered by ships in the China Sea. Along the Yangtszekiang the barometer had fallen half a tenth and light breezes blew from different directions, of course influenced by the course of the river,—the well known fact that the wind blows generally along a river valley being particularly noticeable along the banks of that mighty waterway. At 10 h. 30 m. a. the following notice was telegraphed to the Treaty Ports :—'Typhoon approaching from the East.' In answer to enquiries during the day I stated, that good ships might safely start for Singapore, but not for northern or eastern ports, and also that the Typhoon would probably approach nearest to Hongkong the following morning. The fall in the barometer in Manila had been pointed out in the *China Coast Meteorological Register* on the 19th and the Typhoon had been referred to on the 20th.—During the afternoon of the 21st extremely hot, close and gloomy weather was experienced along the SE coast of China with drizzling rain in some places. The sea was comparatively moderate with a slight SE swell. The lightkeeper at Lamocks saw already at 6 p. from the threatening appearance of the sky, that a Typhoon was approaching. The wind was ENE in that place, increasing

hard squalls, and subsequently heavy rain fell. At the same time it was still raining at S. Cape, the gale abated.

Between 9 p. and 10 p. the Typhoon gun in Hongkong was fired one round, as I had been rmed that it would be impossible to fire it after the latter hour, and on due consideration I con- red it risky to neglect to give warning to the Colony of the violent Typhoon, that would shortly within so short a distance and would probably give rise to a SW gale after passing. In this case rever the greatest violence of the wind was confined to the portion of the Typhoon north of the ter. It blew a fresh NE gale and the sea was tremendous already in the forenoon as far north as at northern entrance to the Formosa Straits. The gale veered to SE during the night. I believe it not unusual for the wind to be most violent north of the center and for the disturbance to extend thest to that side, a circumstance that reminds one of the Mauritius Hurricanes, the E winds nected with which are so extensive according to Meldrum. Whenever a Typhoon crosses the ina Sea, we have generally a long spell of fresh E winds.

The center of the Typhoon passed over Lamocks, the lighthouse outside Swatow, about 3 a. on 22nd. The Typhoon ceased about 2 h. 30 m. a. and recommenced about 4 h. 30 m. a. Captain urrox in the S. S. *Fokien*, then at anchor in the Tongsang Harbour, when about 18 miles from the nter, noticed stars overhead, before and after which the sky was densely covered with clouds, from hich a deluge of rain was pouring down. Six inches of rain during the Typhoon were measured in moy, but as the gauge is situated on the roof of the Custom House, the quantity which actually fell ay not have been far short of ten inches. Four inches of rain were measured in Swatow. A heavy wnpour of rain is also reported from Fisher Island.

The center of the Typhoon moved towards N 12½° W with an increasing velocity, which at 3 a. the 22nd was about 25 miles an hour. The diameter of the central calm was about 46 miles, hich is I believe greater than usual. Its center did not coincide with the place where the barometer ad lowest *i. e.* the center of the isobars, but was situated apparently about 20 miles SSE of that, so at the calm followed after the lowest reading of the barometer. The wind made an angle with the ne towards the center of the central calm of 52° in the advancing semicircle and 45° in the rear or on average 48½°.—so that an observer with his back turned to the wind had the center about midway etween his front and his left. The temperatures recorded vary between 75° and 82°. The average emperature was 78°. It was not higher near the center than elsewhere. The sky was overcast above 60 miles in front of the center. Heavy rain fell above 100 miles in front.

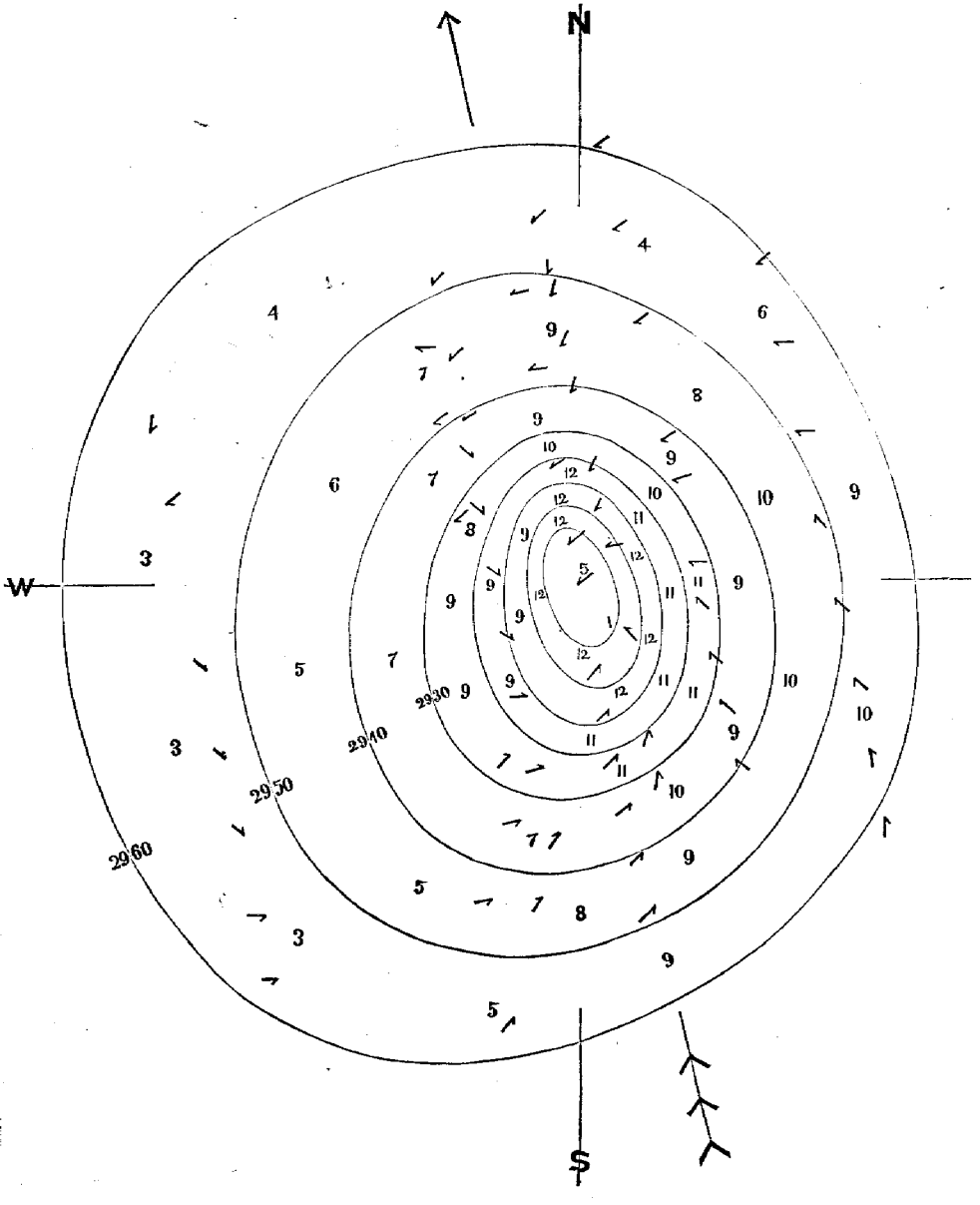
On an average the wind blew a moderate gale (7), when the gradient was 0.02 inches in 15 miles, a fresh gale (8), when the gradient was 0.04, a strong gale (9), when the gradient was 0.06, a whole gale (10), when the gradient was 0.07, a storm (11), when the gradient was 0.09 and with Typhoon force (12), when the gradient was 0.12.

The following table exhibits the most important records concerning this Typhoon. The readings of the barometers have been reduced to 32° and to Sea Level, and index corrections, which I have determined as accurately as possible from available data, have been applied:—

OBSERVATIONS MADE DURING THE TYPHOON OF AUGUST 21ST & 22ND, 1884.

August.	Fisher Island.			Amoy.			Lamocks.			Swatow.			Breaker Point.			Hongkong.		
	Barometer.	Wind. Dir.	Wind. Force.	Barometer.	Wind. Dir.	Wind. Force.	Barometer.	Wind. Dir.	Wind. Force.	Barometer.	Wind. Dir.	Wind. Force.	Barometer.	Wind. Dir.	Wind. Force.	Barometer.	Wind. Dir.	Wind. Force.
4, 6 p.,	29.57	NE	4	29.59	NE	2	29.47	ENE	8	29.46	NE	4	29.48	E	7	29.53	N	1
7 p.,	...	...	...	...	...	...	29.46	...	...	29.46	NE	4	...	...	...	29.54	N	1
8 p.,	...	...	...	...	...	...	29.42	...	...	29.43	NE	5	...	...	...	29.56	NE	2
9 p.,	29.61	E	6	29.59	NE	2	29.41	ENE	9	29.42	NE	5	29.43	NE	8	29.58	NE	4
10 p.,	...	...	...	...	...	...	29.37	...	...	29.46	NE	5	...	...	...	29.60	NNE	1
11 p.,	...	...	...	...	...	...	29.26	...	...	29.45	NE	6	...	...	...	29.59	ENE	3
Midt.,	29.53	E	9	29.51	NE	4	29.13	NE	12	29.41	NW	7	29.31	NE	8	29.57	W	1
nd, 1 a.,	29.49	E	9	29.47	NE	...	28.96	NE	12	29.37	NW	8	...	...	...	29.56	NNW	1
2 a.,	29.46	E	9	...	...	...	28.82	NE	12	29.28	NW	8	...	...	...	29.55	WSW	1
3 a.,	29.44	SE	10	29.41	NE	8	28.85	NE	5	29.12	NW	9	29.23	NE	9	29.53	NW	3
4 a.,	29.43	SE	10	29.31	ENE	9	28.89	NE	5	29.11	NW	9	...	...	...	29.55	NW	3
5 a.,	29.44	SE	10	29.23	...	...	28.94	SW	12	29.07	NW	9	...	...	...	29.53	NW	3
6 a.,	29.45	SE	10	29.21	E	11	29.06	SW	12	29.09	W	9	29.23	SW	9	29.53	NW	2
7 a.,	29.50	SSE	10	29.22	SE	11	...	SW	11	29.19	W	8	...	...	...	29.56	W	2
8 a.,	29.56	SSE	10	29.30	SE	11	...	SW	10	29.30	SW	6	...	...	...	29.57	W	3
9 a.,	29.62	S	9	29.36	SE	9	29.39	SW	9	29.38	SW	5	29.45	SW	6	29.58	W	3
10 a.,	29.63	S	8	29.41	SE	9	...	...	...	29.40	SW	5	...	...	...	29.60	W	3
11 a.,	29.65	S	8	...	...	...	...	...	...	29.44	SW	5	...	...	...	29.61	W	3
Noon,	29.66	S	8	29.47	SSE	8	29.49	SW	6	29.46	SW	4	29.45	SW	6	29.61	W	2
1 p.,	29.65	S	8	...	...	...	...	...	...	29.44	SW	5	...	...	...	29.59	W	2
2 p.,	29.64	S	9	29.48	S	8	...	...	...	29.41	SW	4	...	...	...	29.58	SW	2
3 p.,	29.63	S	9	29.50	SSW	7	29.55	SW	6	29.41	SW	4	29.59	SW	5	29.58	SSW	2
4 p.,	29.63	SSE	9	29.51	SSW	7	...	...	...	29.41	SW	4	...	...	...	29.58	SSW	4
5 p.,	29.64	SSE	9	...	...	...	...	...	...	29.41	SW	3	...	...	...	29.59	SSW	2
6 p.,	29.65	SSE	7	29.54	SSW	6	29.62	S	5	...	...	...	29.63	SW	4	29.59	SSW	2

The following sketch represents the isobars drawn for every tenth of an inch from 28.90 to 29.60, both inclusive. The direction of the wind is shown by arrows, which fly with the wind. The force of the wind as interpolated from the observations is shown in figures (1-12). The scale is $1\frac{2}{3}$ inches to 100 nautical miles. The sketch shows, that the air moved in incurving spirals :—



The greatest damage was done in Amoy, where this Typhoon was the cause of great loss of life and property, although the wind did not attain full Typhoon force, except perhaps in gusts.

At 10a. on the 22nd the center appears to have been situated in 25° 45′ N and 116° 35′ E. Fresh SE gales still blew in the Formosa Straits, where the sea continued very boisterous, and even in southern Formosa, and the weather continued overcast and wet. It rained also here and there along the Yangtzekiang, where the barometer had fallen more than a tenth of an inch in the past 24 hours. Round the Gulf of Pechili the weather was fine with light breezes. In SW China and Tonquin the barometer had fallen nearly a tenth, but the sky was partly clear and gentle W breezes were blowing. The typhoon was proceeding northwards with increasing velocity but with rapidly decreasing energy. In Kiukiang and Wuhu the day continued rainy throughout with on at times strong NE breeze in the first place. In the latter place no wind above strong breeze was recorded, although the center appears to have approached within 60 miles.

At 10a. on the 23rd the center appears to have been in 33° 22′ N and 118° 11′ E. The barometer had fallen two tenths in Chinkiang, where the weather was clearing after continuous rain. A fresh SE gale had been felt. At 6a. the gale veered towards SW with decreasing violence in the course of the day. In Shanghai the breeze veered during the day from SE through S to W and the barometer rose. Outside of Shanghai a fresh SSE gale veering to S was registered. Gentle SW winds prevailed in the south with detached clouds along the coast, and overcast weather in Formosa. — In Chefoo a strong E breeze at 9a. veered through SW and decreased in force during the day, it reached the force of a strong breeze and blew from NW the following midnight. Some damage was done to houses. At the NE Shantung Promontory it blew a whole gale from SE in the morning of the 23rd. This was the cause of the unusually high tide at Taku, which was thought so strange at the time. The gale veered to SW during the day and blew from NW the following day but with less force. The day continued overcast, gloomy, misty, and wet both in Shantung and in Newchwang, but in Taku (Tientsin), whence a fresh E wind is reported, it appears to have been fine weather. In Newchwang a gentle ENE breeze at 1p. increased to a fresh NE gale at midnight. This blew with undiminished force till about 1a. on the 24th, when it backed to N and subsequently to NW and a calm is reported at 4p. same day. The depression appears to have passed off towards ENE, but not having received the telegraphic reports from Wladivostock, owing to the destruction of cables caused by the typhoon, I am not able to ascertain, whether it can be traced as far as that.

In Hongkong electric phenomena were observed every day from the 20th to the 23rd, both inclusive, but such phenomena are not referred to in the registers received from other stations till the evening of the 23rd, when thunder and lightning were registered in the Formosa Straits, and lightning was seen as far north as Shanghai. On the 24th thunder and lightning were again registered in the Straits. It appears therefore, that electric phenomena fallen off but did not precede this typhoon in the places visited by strong wind.

Meantime Typhoon X had made its appearance in the Pacific. Fine, settled weather set in at Manila on the 23rd, and continued up to the 27th, on which latter day a trace of rain was reported, but no wind above a moderate breeze was reported, nor does the barometer, judging from the 10a. and 1p. reports, appear to have fallen much. At 10a. the 23rd a slight NW breeze was registered and the wind had veered to NNW the following morning.

At S. Cape the barometer was lowest at 2p. on the 24th. On the morning of the 24th it blew a fresh NW breeze, which increased to a strong breeze of no height. It then backed to W and decreased in force the following day.

At Hongkong cirrus clouds from ENE were observed at 10a. on the 23rd. They backed to WNW the following day. The barometer was lowest at 5p. on the 24th. Rain fell on the morning of that day.

At N. Saddle Lighthouse, East of Shanghai, there blew a moderate NE gale during the night between the 24th and the 25th. The gale backed to NNW and decreased in the course of the day. The weather continued fine.

The S. S. *San Pablo* at 3p. on the 24th in 27° N and 121° E experienced a NNE gale, a high swell from ESE and a heavy sea from NE, and at 3a. on the 25th a whole gale from NNW, a high swell from NE, a rising sea from NW as well as heavy showers of rain. Afterwards the gale veered towards NW.

Of course it is not possible to project the track of a depression from similar data, but it is possible, that the center of Typhoon X at 10a. on the 23rd was in 15° N and 127° E, at 10a. on the 24th in 21° N and 124½° E and at 10a. on the 25th in 28½° N and 127° E.

This typhoon would perhaps have passed across the China Sea or have struck the SE coast of China, if it had not been drawn towards the previous typhoon, then passing northwards over China. It was perhaps under the influence of that typhoon, that it passed northwards with such an unusual velocity, when it was yet to the east of Formosa, and threw itself on southern Japan with a fury, which is not commonly exhibited by atmospheric disturbances in that latitude. On the night between the 25th and the 26th it caused a great loss of life and property in Nagasaki and also in Kobe.

At 2p. on the 25th Mr. Knipping wrote: "The center of a very deep depression lies between Nagasaki and Kagoshima, the former station reporting 28.91 or a fall of 0.67 inches with a NE gale, (Kagoshima for 1p. 29.13 with a S gale) gales extending to Kochi and Shimonosaki with rain, 0.79 inches at the latter station. In the East the barometer fall is moderate &c.' At 9p. he wrote, 'The stormcenter has moved rapidly NE and appears to be in the central inland sea. Sakai reporting

strong NE wind with 28.98. Wakayama a heavy S gale &c.' On the 26th at 6 a. he wrote. 'At 3 a. the stormcenter passed W of Kanazawa and lies now near Sado, advancing rapidly NE with S gales in central Japan, E winds in the N. Cloudy rainy weather prevails in the E. &c.' And at 2 p.: 'The depression has proceeded in the same direction, NE, but with a much smaller velocity and is somewhat shallower: its center being near Akita with 29.095. Aomori reports strong NE with much rain (1.50 inches). SW winds to gales at all other Eastern stations.' And at 9 p.: 'The center of the depression is progressing very slowly NE and lies E of Akita, which reports 29.13 inches pressure with a N gale and 0.83 inches rain. In central Japan winds have moderated,' &c. From the tri-daily weather maps issued from the Imperial Meteorological Observatory, Tokio, it appears, that the center was in 31° 55′ N, 130° 0′ E at 2 p. on the 25th, in 34° 7′ N, 131° 55′ E at 9 p. on the 25th, in 38° 14′ N, 137° 35′ E at 6 a. on the 26th, in 38° 50′ N, 140° 5′ E at 2 p. on the 26th and in 40° 0′ N 140° 50′ E at 9 p. on the 26th, when it passed off towards ENE.

Light breezes and detached clouds prevailed over southern China till the end of the month. A shallow depression advancing from the W passed across northern China in about 34° latitude on the 29th.

The Baregraph and the Standard Barometer at the Observatory are placed 110 feet above Mean Sea Level. The bulbs of the Thermograph Thermometers are 111 feet above Mean Sea Level and 6 feet above the ground. They are exposed in an unpainted and double-louvered zinc screen fixed to the north wall of the main building in a shaded position. The Solar Radiation Maximum Thermometer is 109 feet above Mean Sea Level and 4 feet above the ground, and the Terrestrial Radiation Minimum Thermometer is about one inch above the ground. The ground was not turfed till the 14th. The self-recording Rain-gauge is placed 106 feet above Mean Sea Level, and the rim, which is $11\frac{1}{2}$ inches in diameter, is 21 inches above the ground. The cups of the Anemograph are 15 feet above the ground, and 150 feet above Mean Sea Level.

At Victoria Peak the Instruments, except the Radiation Thermometers, are placed in the Look-out. The Barometer is 1821 feet above Sea Level. The bulbs of the Thermometers are about 4 feet above the floor, except the Maximum Thermometer, which is a few inches higher. The Radiation Thermometers are placed at the same height above the ground as at the Observatory. At Cape d'Aguilar the Thermometers are placed about 170 feet above Sea Level (according to the *Government Gazette*) in a wooden screen 2 feet above the ground, except the Maximum Thermometer, which is a few inches higher.

Table I exhibits the hourly readings of the height of the Barometer reduced to 32°.0 Fahrenheit, but not to Sea Level, as measured (at two minutes to the hour named) from the Baregrams. The Mean Height of the Barometer was 29.625, the Highest was 29.828 at 10 a. on the 29th, and the Lowest was 29.418 at 5 p. on the 21st and at 4 a. on the 22nd. The Barometric Tide amounted to 0.076.

Table II exhibits the hourly readings of the Temperature (Dry Bulb Thermometer) as measured from the Thermograms (at two minutes past the hour named), and also the Extreme Temperatures during the day. The Mean Temperature was 81.8, the Highest was 92.2 a. at 4h. 48m. p. on the 21st and the Lowest was 73.3 at 6h.2m. on the 27th.

Table III exhibits the hourly readings of the Temperature of Evaporation (Damp Bulb Thermometer) as measured from the Thermograms (at two minutes past the hour named) and also the Solar Radiation Maximum (Black Bulb) and Terrestrial Radiation Minimum Temperatures.

Table IV exhibits the Mean Relative Humidity in percentage of saturation (the humidity of air saturated with moisture being 100) and Mean Tension of Aqueous Vapour present in the air expressed in inches of mercury, for every hour in the day and for every day in the month. The Mean Tension, which exhibits a small daily variation, was 0.886. The Mean Relative Humidity, which exhibits a great daily variation, was 82.

Table V exhibits the Duration of Sun-shine as registered by aid of the Sun-shine Recorder from half an hour before to half an hour after the hour named. The Sun shone 206.3 hours during the month.

Table VI exhibits the amount of Rain registered from half an hour before to half an hour after the hour named. The Total Rain-fall during the month was 10.815 inches. It rained during 79 hours. The greatest Hourly Rain-fall was 0.835 at 6 p. on the 15th.

Table VII exhibits, for every hour in the day, the Velocity of the Wind and its Direction in numbers (8=E. 16=S. 24=W. 32=N) as measured from the Anemograms. The Velocity is the number of miles traversed by the Wind, from half an hour before to half an hour after the hour named. The Direction is read off at the hour, except when the Wind is very light and changeable, when the average Direction during the hour is estimated, taking into account the Velocity from different quarters. The Direction is not noted when the Velocity is below 1.5 miles an hour.

The Mean Velocity was 7.0 miles an hour. It was greatest during the middle of the day. The greatest Velocity 27 miles occurred at 3 p. on the 23rd.

The Total Distance travelled by, as well as the Duration and average Velocity of Winds from different quarters were as follows:—

Direction.	*Total Distance.* Miles.	*Duration.* Hours.	*Velocity.* Miles per hour.
N	213	30	7.1
NE	203	36	5.6
E	1,386	162	8.5
SE	424	76	5.6
S	850	137	6.2
SW	807	85	9.5
W	853	94	9.1
NW	454	63	7.2
Calm	39	61	0.6

Table VIII exhibits, for every hour in the day, the Velocity of the Wind reduced to 4 and also to 2 Directions, as well as the Mean Direction of the Wind, which exhibits a great daily variation.

Table IX exhibits the Direction (to two points) and Force of the Wind (0-12) at Victoria Peak. The Average Force of the Wind was 3.2 corresponding to 19 miles an hour. The Sea Disturbance (0-9) exhibited in the same table has been derived from observations made at Cape d'Aguilar.

Table X exhibits the Amount (0-10), Name and Direction, whence coming, of the Clouds. Where the names of Upper and Lower Clouds are given, but only one Direction, this refers to the Lower Clouds. The prevailing Direction of the Wind at the Observatory, as shewn in Table VIII, was about S by E: at the Peak, as shewn in Table IX about S; the Direction of the Lower Clouds was about S. On an average 58 per cent of the sky was clouded.

Table XI and Table XII exhibit the readings of the Barometer reduced to 32.0 Fahrenheit but not to Sea Level, at Victoria Peak, and the Thermometers at Victoria Peak and at Cape d'Aguilar.

The Mean Height of the Barometer at the Peak was 27.937. The Mean Temperature was 74.5 at the Peak and 81.3 at Cape d'Aguilar, the Highest was 82.9 on the 21st at the Peak and 92.3 on the same day at Cape d'Aguilar, and the Lowest was 67.7 on the 15th at the Peak, and 74.8 on the 16th at Cape d'Aguilar.

The Mean Temperature in Hongkong decreased one degree Fahrenheit for every 238 feet ascended.

Table XIII exhibits the Relative Humidity as determined from observations of the Dry and Damp Bulb Thermometers. The Mean Relative Humidity at the Observatory was 82, at Cape d'Aguilar 89, and at Victoria Peak 95. These numbers are reduced to the mean of the 24 hours by aid of Table IV. The Least Relative Humidity registered was 54 at the Observatory, 65 at Cape d'Aguilar, and 71 at Victoria Peak, all occurring at 4 p. on the 21st.

Table XIV exhibits the Tension of Aqueous Vapour at the Observatory and at the Peak. The Mean Tension was 0.886 at the Observatory, and 0.801 at the Peak. The Greatest Tension registered was 1.094 at 1 p. on the 12th at the Observatory, and 0.897 at 1 p. on the 20th at the Peak. The Least Tension was 0.768 at 1 p. on the 25th at the Observatory, and 0.696 at 10 p. on the 4th at the Peak.

Table XV exhibits the amount of Rain measured at 10 a. on the following day, and the duration of Precipitation at the Observatory. The greatest amount fell on the 15th when it rained 2.500 at the Observatory, 2.34 at Stone Cutters' Island, and 3.36 at the Peak.

Lightning and distant Thunder were registered in the evening of the 6th and until the morning of the 8th.

Lightning was seen in the evenings of the 8th, the 9th and the 10th.

Faint Thunder was heard during the afternoon of the 11th.

Thunder and Lightning were seen in the morning and in the evening of the 12th.

Lightning was seen in the evening of the 13th and during the following night, and in the evening of the 14th, the 17th, the 18, and the 19th.

Very vivid Lightning accompanied by Thunder was seen in the evening of the 20th and during the following night.

Thunder and Lightning were registered in the morning and in the evening of the 21st. Lightning during the following day and Thunder and Lightning during the 23rd.

At 5 a. on the 24th a Thunderstorm passed over. Thunder and Lightning were registered during the following night and up to the afternoon of the 26th.

Lightning was seen in the afternoon of the 27th and during the following night.

Faint Thunder was heard at 4 p. on the 29th, and faint Lightning was seen the same evening and also in the evening of the 31st.

Unusual visibility was noticed on the 1st, the 2nd, the 4th, the 5th, the 9th, the 10th, the 19th, and the 30th.

Dew fell in the evenings of the 4th, of the 8th, of the 29th, of the 30th and during the nights between the 19th and the 20th, and between the 30th and the 31st.

Rainbows were seen in the afternoon on the 10th and the 12th.

A Lunar Corona was seen fully formed at 8 p. on the 3rd. Lunar Halos were observed on the 2nd, the 6th, the 7th, the 30th and the 31st.

Solar Halos were observed on the 6th, the 22nd, the 23rd and the 31st.

Fog was not seen but Haze in the mornings of the 8th and the 22nd.

TABLE I.

BAROMETRIC PRESSURE FOR THE MONTH OF AUGUST, 1884.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midn.	Means.
Aug. 1. ...	29.696	29.684	29.680	29.679	29.681	29.690	29.698	29.722	29.723	29.736	29.737	29.711	29.699	29.687	29.659	29.636	29.644	29.643	29.618	29.608	29.678	29.680	29.678	29.695	29.681
„ 2, ...	.657	.649	.655	.655	.649	.655	.651	.651	.675	.679	.685	.693	.677	.597	.582	.575	.557	.557	.560	.589	.582	.602	.600	.588	.615
„ 3, ...	.580	.566	.556	.553	.556	.558	.540	.502	.507	.504	.504	.503	.529	.509	.491	.468	.461	.454	.475	.503	.536	.555	.556	.597	.531
„ 4, ...	.517	.501	.486	.486	.490	.508	.519	.526	.515	.511	.504	.501	.504	.484	.469	.466	.466	.466	.485	.503	.530	.551	.549	.551	.509
„ 5, ...	.515	.509	.501	.501	.501	.525	.538	.552	.551	.539	.537	.532	.512	.492	.477	.463	.469	.482	.489	.508	.527	.549	.544	.546	.514
„ 6, ...	.499	.499	.492	.510	.507	.517	.519	.529	.541	.533	.533	.533	.506	.484	.464	.460	.461	.478	.505	.525	.528	.525	.530	.538	.510
„ 7, ...	.516	.498	.502	.509	.525	.540	.557	.563	.565	.563	.557	.559	.552	.524	.504	.493	.498	.507	.498	.508	.550	.570	.574	.584	.542
„ 8, ...	.576	.572	.550	.543	.548	.541	.541	.577	.564	.547	.537	.536	.528	.509	.514	.498	.510	.518	.529	.558	.572	.578	.570	.574	.553
„ 9, ...	.566	.559	.547	.542	.543	.547	.559	.570	.570	.561	† .568	† .566	† .559	† .537	† .511	† .495	† .503	† .521	† .536	† .551	† .568	† .576	† .580	† .580	.551
„ 10, ...	.578	.567	.571	.577	.583	.614	.604	.611	.614	.618	.621	.618	.604	.586	.567	.575	.570	.583	.602	.624	.630	.627	.616	.624	.602
„ 11, ...	.621	.615	.614	.609	.610	.625	.630	.631	.631	.632	† .634	† .635	† .632	† .626	† .626	† .574	† .576	† .579	† .605	† .618	† .633	† .637	† .629	† .622	.616
„ 12, ...	† .616	† .611	† .607	† .606	† .598	† .603	† .616	.625	.630	.633	.636	.636	.634	.671	.599	.556	.533	.545	.599	.581	.598	.594	.598	.592	.594
„ 13, ...	.577	.576	.574	.577	.572	.580	.586	.591	.593	.592	.595	.598	.588	.575	.542	.531	.527	.542	.569	.590	.591	.584	.583	.575	.574
„ 14, ...	.559	.551	.548	.549	.553	.562	.580	.624	.639	.647	.646	.638	.572	.559	.560	.555	.554	.565	.585	.611	.629	.647	.639	.622	.586
„ 15, ...	.612	.603	.600	.603	.610	.630	.647	.659	.667	.668	.671	.669	.657	.627	.602	.593	.593	.602	.626	.648	.671	.679	.674	.674	.626
„ 16, ...	.673	.671	.653	.650	.653	.663	.695	.726	.735	.731	.729	.724	.704	.684	.668	.654	.649	.645	.655	.687	.712	.709	.705	.689	.683
„ 17, ...	.675	.665	.648	.671	.654	.670	.690	.691	.696	.695	.686	.682	.672	.654	.641	.618	.629	.641	.655	.674	.691	.689	.686	.685	.678
„ 18, ...	.685	.665	.657	.659	.645	.659	.685	.697	.698	.714	.711	.713	.705	.688	.673	.660	.661	.670	.695	.719	.730	.725	.730	.730	.695
„ 19, ...	.748	.732	.727	.724	.724	.732	.742	.747	.750	.751	.750	.751	.742	.728	.715	.708	.707	.718	.725	.741	.759	.752	.756	.760	.742
„ 20, ...	.767	.754	.744	.726	.722	.730	.738	.746	.750	.756	.756	.748	.739	.723	.684	.620	.606	.608	.623	.637	.658	.666	.658	.677	.691
„ 21, ...	.614	.626	.598	.592	.593	.596	.596	.611	.622	.626	.631	.609	.575	.568	.550	.532	.418	.424	.428	.450	.468	.486	.473	.531	.516
„ 22, ...	.444	.437	.422	.418	.420	.420	.413	.409	.422	.424	.429	.433	.463	.471	.470	.468	.473	.480	.508	.548	.567	.593	.578	.587	.485
„ 23, ...	.589	.584	.587	.591	.601	.606	.617	.637	.649	.647	.653	.651	.627	.604	.599	.612	.616	.616	.619	.629	.627	.627	.619	.631	.622
„ 24, ...	.651	.648	.631	.638	.638	.631	.624	.622	.625	.631	.628	.633	.619	.625	.607	.595	.585	.591	.603	.621	.635	.658	.657	.651	.632
„ 25, ...	.649	.641	.629	.636	.639	.641	.639	.647	.647	.647	.654	.655	.650	.645	.605	.595	.589	.613	.621	.635	.659	.678	.672	.672	.641
„ 26, ...	.673	.669	.662	.663	.667	.677	.687	.706	.712	.713	.716	.717	.703	.677	.652	.646	.663	.664	.676	.693	.708	.722	.711	.707	.686
„ 27, ...	.699	.689	.682	.688	.702	.724	.744	.767	.774	.778	.782	.779	.765	.745	.728	.711	.688	.698	.703	.704	.723	.731	.707	.773	.731	.736	.727
„ 28, ...	.738	.727	.718	.718	.724	.739	.747	.766	.780	.789	.793	.790	.778	.763	.748	.738	.740	.756	.767	.792	.786	.789	.779	.771	.769
„ 29, ...	.777	.778	.774	.774	.782	.794	.801	.815	.819	.818	.819	.819	.805	.785	.765	.748	.741	.740	.735	.748	.764	.780	.768	.797	.797	.792	.780
„ 30, ...	.775	.767	.757	.759	.758	.770	.773	.775	.776	.772	.771	.775	.762	.746	.736	.695	.678	.668	.685	.700	.716	.733	.719	.738	.747
„ 31, ...	.725	.714	.707	.703	.702	.707	.712	.714	.716	.717	.720	.721	.713	.704	.689	.658	.661	.668	.668	.692	.711	.730	.716	.737	.709
Hourly Means,	29.632	29.623	29.615	29.615	29.619	29.637	29.653	29.675	29.691	29.695	29.701	29.695	29.673	29.643	29.604	29.591	29.583	29.582	29.589	29.601	29.624	29.641	29.631	29.671	29.625

† Approximate Reading.

TEMPERATURE FOR THE MONTH OF AUGUST, 1884.

Date:	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means	Max.	Min.
Aug. 1,	78.7	78.4	78.4	78.4	78.1	78.0	79.7	81.1	81.8	82.6	82.5	84.2	85.7	87.3	88.3	87.3	85.3	83.4	81.2	80.2	79.9	79.7	79.1	78.5	81.6	88.5	78.0
„ 2,	78.5	78.1	77.9	77.4	77.5	77.5	79.1	80.5	82.4	83.7	83.3	84.1	85.7	86.1	86.8	86.3	85.2	84.4	82.1	81.0	80.2	79.9	79.5	79.1	81.6	87.7	77.1
„ 3,	79.0	78.4	78.3	78.2	78.1	78.2	78.9	81.0	81.9	84.7	85.5	84.8	86.6	85.2	86.0	84.6	83.4	82.4	81.5	80.5	80.2	80.1	79.9	79.2	81.5	87.4	78.0
„ 4,	78.8	78.4	78.0	77.5	77.2	77.1	78.8	80.8	82.5	84.3	85.4	87.2	89.0	90.8	91.5	90.3	88.0	85.3	83.0	81.4	80.6	79.9	79.1	78.6	82.6	91.5	76.9
„ 5,	78.1	77.9	77.5	77.3	77.1	77.2	78.6	80.8	83.2	85.0	83.6	84.5	85.8	86.0	88.1	88.7	88.3	85.4	83.2	81.9	81.2	80.4	79.8	79.5	82.0	89.3	76.8
„ 6,	79.4	79.0	78.9	78.7	78.1	79.0	79.5	80.8	82.0	83.3	84.5	86.0	87.1	89.0	89.3	90.2	89.1	87.6	85.1	83.8	83.6	83.4	83.0	82.2	83.1	90.3	78.1
„ 7,	82.1	81.6	81.1	81.7	81.7	81.8	82.3	83.1	85.4	85.3	85.2	85.5	84.5	82.0	81.2	82.0	82.9	82.4	81.7	81.3	81.4	81.1	80.9	80.9	82.5	87.2	80.0
„ 8,	80.8	75.9	76.0	76.6	77.1	78.0	79.4	80.6	81.5	82.1	82.3	82.5	84.0	83.3	84.1	84.3	85.0	83.4	82.0	81.0	80.6	79.9	79.8	79.1	80.8	85.0	75.9
„ 9,	78.9	78.7	78.4	78.0	78.0	78.0	79.3	80.7	81.4	82.2	83.6	85.0	86.3	89.0	91.3	90.7	87.5	86.3	83.9	82.4	81.7	81.1	80.4	80.5	82.6	91.3	77.8
„ 10,	80.1	79.8	79.4	79.2	79.1	79.1	80.6	82.7	82.1	84.0	85.1	87.4	89.9	91.0	90.3	90.2	88.3	85.8	83.5	82.7	81.7	81.5	81.1	81.0	83.6	91.4	78.8
„ 11,	80.7	80.6	80.3	79.8	79.3	78.1	79.1	79.8	82.2	83.3	85.7	84.3	83.9	87.6	87.0	86.1	85.9	84.0	83.1	82.5	82.2	82.2	81.7	81.0	82.6	89.3	78.1
„ 12,	81.7	81.7	81.9	81.5	81.9	81.9	82.1	83.3	84.7	83.9	81.5	82.0	86.2	81.5	84.7	85.8	86.4	83.5	83.0	82.1	81.7	81.3	80.7	80.2	82.7	87.0	80.2
„ 13,	80.2	78.9	76.1	75.8	75.7	76.6	77.8	80.3	83.2	84.2	86.1	88.0	89.5	89.5	88.0	86.1	84.7	83.5	82.1	81.2	80.0	78.5	78.8	79.2	81.8	91.2	74.9
„ 14,	79.2	79.2	78.0	77.0	77.1	77.2	77.4	77.1	77.3	78.1	81.7	84.2	84.0	85.1	85.3	84.6	83.7	82.1	80.3	80.1	79.9	76.8	76.8	76.9	80.0	85.6	76.7
„ 15,	77.2	77.5	78.0	77.4	76.0	76.5	77.5	78.0	79.2	80.0	78.5	78.0	78.0	79.6	79.9	80.0	79.6	77.1	76.7	76.6	77.7	78.0	78.4	78.0	78.1	81.4	75.2
„ 16,	77.9	78.2	78.7	78.7	79.0	79.2	77.1	76.9	77.1	77.1	76.8	76.9	77.8	78.4	79.2	80.0	80.0	79.3	78.7	78.2	76.5	75.9	76.1	76.4	77.9	80.3	75.9
„ 17,	76.7	76.7	76.8	76.9	77.2	77.6	78.9	81.0	79.6	79.0	79.5	81.7	84.3	83.7	84.0	84.9	83.1	81.7	80.9	80.5	80.5	80.0	79.7	79.3	80.2	85.3	76.4
„ 18,	79.3	79.0	78.7	78.1	78.1	78.0	79.2	79.2	81.6	85.8	85.5	86.3	87.2	88.3	87.7	87.5	87.0	84.2	82.1	81.1	80.7	80.2	80.0	79.3	82.2	89.2	77.8
„ 19,	79.1	79.7	79.1	79.2	79.2	79.2	80.4	81.8	82.9	84.0	85.0	85.9	87.0	88.4	88.3	88.1	86.2	83.9	82.0	81.2	81.0	80.8	80.5	80.2	82.6	88.9	79.0
„ 20,	80.0	79.3	79.1	79.0	78.3	78.6	79.8	81.2	83.2	85.2	85.5	85.8	85.8	87.0	87.7	88.6	87.4	85.7	85.1	84.1	81.4	81.5	79.3	80.0	82.9	88.9	78.2
„ 21,	80.4	80.1	80.1	80.1	79.9	80.0	80.4	81.2	85.1	86.5	88.0	89.0	90.4	90.8	91.3	91.1	91.7	90.1	88.5	88.4	82.1	80.6	80.9	80.9	84.9	92.2	78.7
„ 22,	81.3	80.9	80.2	79.8	80.6	80.5	81.1	82.4	83.1	84.1	85.0	85.7	87.9	90.0	90.5	87.3	86.3	84.9	84.1	83.3	82.8	82.1	82.1	81.9	83.7	90.7	79.8
„ 23,	81.8	81.8	81.9	81.3	81.2	80.1	81.5	82.1	83.2	84.2	86.0	86.9	87.7	89.6	88.5	88.3	84.9	83.6	82.2	81.7	81.2	81.0	80.3	80.1	83.4	89.7	80.1
„ 24,	80.0	79.6	79.8	77.7	76.3	75.0	75.0	76.9	79.0	80.4	82.4	84.0	84.8	85.2	85.8	83.3	83.4	82.0	81.8	81.9	81.2	81.6	81.8	81.5	80.8	86.4	74.9
„ 25,	80.8	81.2	81.2	81.1	80.2	80.2	80.8	82.1	83.0	84.0	85.1	85.1	86.3	89.6	89.6	86.6	86.9	85.0	83.5	82.8	82.4	82.1	82.1	82.2	83.5	90.1	80.0
„ 26,	82.1	81.4	81.1	81.1	80.9	80.9	81.2	82.4	82.9	86.1	84.4	85.1	88.0	86.5	87.1	88.9	87.3	84.8	83.5	83.0	82.4	82.5	81.1	79.8	83.5	89.6	79.8
„ 27,	77.9	79.3	79.4	79.8	76.5	73.3	75.1	75.9	78.2	81.4	83.5	80.1	81.5	84.1	85.5	84.6	84.4	82.0	79.0	78.9	79.0	79.2	79.7	78.8	79.9	85.6	73.3
„ 28,	78.8	79.0	79.2	80.6	81.0	77.9	80.7	82.9	80.1	80.1	78.9	78.8	77.5	77.3	77.9	78.2	79.9	79.2	78.3	78.1	78.1	78.1	78.0	78.1	79.0	82.1	77.2
„ 29,	78.5	78.2	77.9	77.9	78.0	78.2	78.9	80.0	81.8	78.3	82.2	80.0	83.1	84.5	86.0	86.6	84.7	82.1	81.0	80.9	80.3	80.2	79.9	79.6	80.8	87.3	77.1
„ 30,	79.6	79.1	78.9	78.7	78.2	78.2	79.8	79.9	82.0	86.9	76.3	78.2	80.9	83.6	85.6	86.9	86.6	83.6	81.8	81.0	80.9	80.1	80.0	79.6	81.0	87.3	76.1
„ 31,	79.5	79.3	79.1	79.0	78.7	78.6	79.9	81.7	82.5	82.6	84.4	82.3	84.8	85.5	86.2	87.1	85.0	83.1	82.1	81.4	81.6	81.4	81.2	80.7	82.0	87.4	78.6
Hourly Means,	79.6	79.3	79.0	78.8	78.6	78.4	79.4	80.6	81.8	82.8	83.3	83.9	85.4	86.0	86.5	86.3	85.4	83.6	82.2	81.5	80.8	80.4	80.1	79.8	81.8	87.9	77.6

TABLE III.

TEMPERATURE OF EVAPORATION AND RADIATION, FOR THE MONTH OF AUGUST, 1881.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means.	Sun.	Rad.
Aug. 1,.....	75.0	74.9	75.2	75.2	75.2	75.6	76.2	77.0	77.1	77.3	77.1	78.0	78.3	79.2	79.2	79.1	77.9	77.1	76.6	75.9	76.0	76.0	76.1	76.1	76.7	148.6	75.2
„ 2,.....	76.1	75.4	75.1	74.8	75.6	75.8	76.0	76.0	76.4	76.5	76.9	77.0	79.1	78.0	77.7	77.7	76.9	77.0	76.9	76.1	76.7	76.9	76.0	75.9	76.5	150.7	74.1
„ 3,.....	76.0	76.2	75.9	75.8	75.8	75.9	76.3	76.8	76.8	78.2	79.3	78.3	79.5	78.9	78.8	78.9	78.1	77.8	77.6	77.0	76.8	76.9	76.5	76.2	77.3	149.7	75.0
„ 4,.....	76.1	75.8	75.9	75.7	75.7	75.1	76.5	77.3	77.0	77.7	77.9	77.9	78.6	78.2	79.7	78.8	77.6	77.0	76.1	76.0	76.0	76.2	75.6	75.5	76.8	148.7	73.4
„ 5,.....	75.4	75.1	75.1	74.9	75.3	75.1	75.8	75.9	77.5	77.9	77.7	77.9	78.2	78.0	77.8	77.8	78.4	76.8	76.7	76.6	76.0	76.0	75.8	76.2	76.6	149.9	73.5
„ 6,.....	76.2	76.0	76.0	75.6	75.1	75.7	76.7	76.8	76.8	76.0	77.2	78.9	79.8	79.8	80.1	80.3	80.1	81.0	80.0	79.7	79.8	79.6	79.2	79.1	78.1	147.8	75.0
„ 7,.....	79.0	78.8	78.0	78.8	78.9	78.4	78.7	79.6	79.7	79.7	79.3	79.5	79.5	77.5	77.2	77.4	78.7	78.8	78.8	78.9	78.9	79.1	78.8	78.6	78.8	156.6	79.0
„ 8,.....	77.0	74.6	74.8	74.9	75.5	75.7	76.0	76.4	76.1	77.3	76.9	77.4	77.6	76.9	76.7	76.0	77.5	77.8	77.3	76.9	76.7	77.0	76.9	76.9	76.5	142.2	75.5
„ 9,.....	76.7	76.1	76.2	75.8	75.9	76.1	77.0	76.8	76.9	76.2	76.5	76.6	75.6	78.7	79.2	80.5	78.0	78.7	77.8	77.2	77.2	76.9	76.6	76.7	77.1	144.4	75.0
„ 10,.....	76.9	76.0	77.0	76.2	76.8	76.9	77.3	78.3	76.8	76.8	78.3	79.3	79.8	81.0	80.5	80.7	80.4	79.1	78.1	78.0	77.8	77.8	78.0	77.8	78.1	146.8	74.9
„ 11,.....	77.5	77.3	77.5	76.7	77.4	76.8	77.5	77.7	78.0	78.4	79.7	79.4	80.3	80.9	80.3	79.6	79.5	79.0	78.5	78.2	78.3	78.3	78.4	78.2	78.5	149.6	75.6
„ 12,.....	78.1	77.8	77.7	77.8	77.9	78.0	77.9	78.3	79.5	77.8	77.4	77.3	80.9	78.9	80.4	81.2	80.4	78.0	78.8	78.8	78.3	78.3	78.4	78.3	78.6	145.7	77.1
„ 13,.....	78.0	76.4	75.7	75.2	74.8	75.8	77.1	78.4	79.8	79.9	80.0	80.3	81.6	81.5	80.4	80.3	79.4	79.1	79.1	78.7	77.9	76.8	77.3	77.7	78.4	152.4	74.0
„ 14,.....	77.2	77.5	76.2	75.9	76.0	76.0	75.8	75.2	75.6	76.1	77.3	79.0	78.0	79.1	79.6	78.8	79.0	78.6	77.1	77.3	75.4	75.2	75.3	77.0	150.9	73.8
„ 15,.....	75.3	76.0	76.3	76.0	74.4	74.9	75.6	75.9	76.7	77.1	76.6	76.4	76.2	77.0	77.8	76.9	77.5	75.9	75.3	75.3	76.0	76.1	75.8	75.9	76.1	106.5	73.1
„ 16,.....	75.8	75.7	76.0	76.1	76.0	76.1	75.0	74.8	74.8	75.4	75.0	74.8	75.2	75.9	75.8	76.1	75.9	76.1	75.8	76.1	74.5	74.5	74.7	74.8	75.5	104.0	73.3
„ 17,.....	75.2	75.4	75.4	75.7	75.9	76.0	76.9	78.1	76.0	76.5	76.8	78.0	79.2	78.9	78.8	79.0	78.0	77.5	77.7	77.7	77.8	77.8	77.5	77.3	77.2	128.2	73.9
„ 18,.....	77.2	77.0	77.1	76.8	76.5	76.7	77.2	77.7	78.3	78.8	78.9	79.4	79.4	80.0	79.1	80.1	80.0	78.6	78.2	77.8	77.9	77.6	76.9	76.9	78.1	150.1	75.1
„ 19,.....	76.9	76.8	76.9	76.9	76.8	76.8	77.2	77.8	78.0	78.5	79.5	80.0	80.7	81.0	80.4	80.7	79.8	79.3	78.8	78.4	78.2	78.4	78.0	77.8	78.5	151.5	76.0
„ 20,.....	77.7	77.2	77.0	76.5	75.9	76.8	76.6	78.0	76.9	76.2	77.0	78.8	79.2	80.6	81.0	81.4	80.7	79.7	79.4	79.8	73.0	75.1	73.9	76.0	77.7	145.1	75.4
„ 21,.....	77.3	77.8	77.5	77.6	77.9	77.0	77.8	78.0	77.5	78.2	78.7	78.0	77.3	77.7	78.0	78.1	79.0	77.9	78.3	82.8	78.7	74.7	75.5	74.6	77.7	155.7	74.0
„ 22,.....	74.3	74.2	74.3	74.7	73.6	75.1	76.5	76.0	*76.4	76.8	77.3	77.1	77.5	79.9	80.8	78.8	78.4	78.8	77.7	78.2	78.4	78.6	78.6	78.2	77.1	148.6	76.4
„ 23,.....	78.8	79.0	79.5	79.0	76.2	75.9	77.3	77.6	78.7	80.1	81.1	81.6	80.8	80.8	80.2	80.0	78.7	77.6	76.0	77.1	76.9	76.8	77.0	76.7	78.5	150.9	76.6
„ 24,.....	77.1	76.0	76.7	75.8	74.2	73.4	73.7	74.8	75.6	75.6	77.7	78.4	78.9	79.3	79.9	78.3	77.2	76.1	75.8	76.7	76.8	77.5	78.7	78.2	76.8	145.5	73.2
„ 25,.....	78.0	78.0	78.0	77.9	77.8	77.7	78.0	78.7	78.8	78.1	79.3	79.6	79.4	81.7	81.6	78.7	79.8	79.2	79.3	78.9	78.8	78.5	78.3	78.5	78.9	146.6	76.6
„ 26,.....	78.7	77.9	77.8	77.8	77.0	77.5	78.1	77.9	78.0	79.4	79.2	79.0	80.8	79.9	80.2	80.3	80.3	78.8	78.7	78.3	78.3	78.7	77.1	76.5	78.6	154.6	76.5
„ 27,.....	74.9	76.3	77.0	77.2	74.6	72.2	74.2	74.5	76.1	78.1	78.9	76.4	77.5	78.1	79.3	79.1	77.8	77.7	75.7	76.6	77.1	77.5	77.0	76.0	76.7	144.0	73.3
„ 28,.....	76.8	76.9	77.4	78.1	78.0	76.1	78.0	78.2	76.2	77.6	76.3	77.6	75.7	76.5	75.9	75.8	76.2	76.5	76.0	76.0	75.8	75.9	76.0	76.0	76.7	111.7	74.0
„ 29,.....	75.9	75.9	76.0	76.2	76.6	76.8	77.0	77.7	78.9	74.9	76.8	75.7	79.1	80.2	80.1	80.2	79.7	78.2	78.3	78.6	78.2	77.9	78.1	77.9	77.7	139.1	75.1
„ 30,.....	75.9	76.7	76.2	75.9	76.0	76.7	76.2	76.8	77.7	78.9	75.1	76.0	76.9	78.3	79.3	79.0	79.8	78.8	78.7	78.3	77.9	78.0	77.7	77.8	77.4	141.7	74.2
„ 31,.....	77.7	77.7	77.2	77.0	77.2	77.6	78.1	78.4	76.8	77.9	78.0	77.3	78.7	78.6	78.7	78.4	79.0	77.6	77.6	77.1	77.0	77.3	77.6	76.9	77.7	150.6	74.8
Hourly Means, ...	76.7	76.5	76.5	76.4	76.1	76.1	76.7	77.1	77.3	77.5	77.9	78.1	78.7	79.1	79.2	79.0	78.7	78.1	77.6	77.7	77.3	77.2	77.0	76.9	77.5	143.8	74.9

* Interpolated.

TABLE IV.

AN HOURLY AND DAILY RELATIVE HUMIDITY AND TENSION OF AQUEOUS VAPOUR FOR THE MONTH OF AUGUST, 1884.

HOUR.	HOURLY MEAN. Humidity.	HOURLY MEAN. Tension.	DATE.	DAILY MEAN. Humidity.	DAILY MEAN. Tension.
			1884.		
1 a.	87	0.881	Aug. 1,.....	79	0.854
2 „	88	0.876	„ 2,.....	79	0.846
3 „	89	0.880	„ 3,.....	82	0.881
4 „	89	0.878	„ 4,.....	76	0.845
5 „	89	0.868	„ 5,.....	77	0.844
6 „	90	0.871	„ 6,.....	78	0.892
7 „	88	0.883	„ 7,.....	84	0.935
8 „	85	0.885	„ 8,.....	81	0.856
9 „	81	0.877	„ 9,.....	77	0.858
10 „	78	0.873	„ 10,.....	77	0.889
11 „	77	0.884	„ 11,.....	83	0.923
Noon.	76	0.885	„ 12,.....	83	0.924
1 p.	73	0.891	„ 13,.....	85	0.927
2 „	72	0.902	„ 14,.....	87	0.889
3 „	71	0.901	„ 15,.....	91	0.875
4 „	71	0.894	„ 16,.....	89	0.852
5 „	73	0.891	„ 17,.....	87	0.895
6 „	77	0.889	„ 18,.....	83	0.908
7 „	81	0.886	„ 19,.....	83	0.921
8 „	84	0.900	„ 20,.....	78	0.881
9 „	85	0.891	„ 21,.....	71	0.853
10 „	86	0.892	„ 22,.....	73	0.843
11 „	87	0.888	„ 23,.....	79	0.910
Midt.	87	0.887	„ 24,.....	83	0.869
			„ 25,.....	83	0.928
			„ 26,.....	79	0.913
			„ 27,.....	86	0.877
			„ 28,.....	90	0.889
			„ 29,.....	87	0.910
			„ 30,.....	85	0.893
			„ 31,.....	82	0.893
Mean, ...	82	0.886	Mean,.....	82	0.886

TABLE V.

DURATION OF SUNSHINE.

DATE.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	Sums.
1884.														
1,	...	0.9	1.0	1.0	0.8	0.3	0.7	1.0	1.0	1.0	1.0	1.0	0.5	10.2
2,	0.3	1.0	1.0	1.0	1.0	1.0	1.0	0.8	0.1	0.6	1.0	1.0	0.5	10.3
3,	...	0.6	1.0	1.0	1.0	0.4	...	0.1	...	0.2	...	...	...	4.3
4,	0.2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	11.7
5,	0.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.3	11.4
6,	...	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.3	11.2
7,	...	...	0.5	0.6	1.0	1.0	0.8	...	...	...	...	...	...	3.9
8,	...	0.3	...	0.6	0.1	...	...	0.2	0.1	0.1	...	...	...	1.4
9,	0.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.4	11.5
10,	0.2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.8	0.9	1.0	1.0	0.5	11.4
11,	...	...	0.1	0.4	...	...	0.3	0.6	0.9	0.1	0.7	0.9	...	3.8
12,	...	...	...	0.5	0.3	...	...	0.3	...	...	0.8	0.4	...	2.3
13,	...	...	0.8	1.0	1.0	1.0	1.0	1.0	1.0	0.2	0.1	...	...	7.1
14,	...	...	...	...	...	...	0.2	0.5	0.1	...	0.6	0.1	...	1.5
15,	...	...	...	...	...	...	...	...	...	...	...	...	...	0.0
16,	...	...	...	...	...	...	...	...	...	...	...	...	...	0.0
17,	...	0.1	0.5	...	...	...	...	...	...	0.1	0.4	...	...	1.1
18,	...	0.5	0.2	0.6	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.3	9.6
19,	...	0.6	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.9	1.0	1.0	0.4	10.9
20,	0.2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.4	11.6
21,	...	0.7	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.9	1.0	0.9	0.2	10.7
22,	...	0.6	1.0	1.0	1.0	1.0	0.6	1.0	1.0	0.8	...	...	...	8.0
23,	...	...	...	0.5	0.8	1.0	1.0	1.0	1.0	1.0	0.7	...	...	7.0
24,	...	...	...	0.1	1.0	1.0	1.0	1.0	1.0	0.8	0.8	0.5	...	7.5
25,	...	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.6	0.5	0.1	10.1
26,	...	0.9	0.9	1.0	1.0	1.0	0.9	0.5	0.6	0.8	0.9	0.6	0.1	9.2
27,	...	...	...	...	...	0.7	0.4	0.2	0.4	...	...	0.1	...	1.8
28,	...	...	0.1	...	...	...	...	...	...	...	...	...	...	0.1
30,	...	...	...	...	...	...	...	0.3	0.7	0.6	0.9	0.1	...	2.6
31,	...	0.4	0.7	1.0	0.6	...	...	0.6	1.0	1.0	1.0	1.0	...	7.3
	...	0.2	0.6	1.0	1.0	1.0	0.9	0.9	0.3	0.3	0.6	...	...	6.8
Sums,.....	1.1	13.6	17.4	20.6	20.6	19.4	18.6	20.0	19.0	17.3	19.1	15.1	4.5	206.3
ly Means, ...	0.04	0.44	0.56	0.66	0.66	0.63	0.60	0.65	0.61	0.56	0.62	0.49	0.15	0.67

TABLE VI.

RAINFALL FOR THE MONTH OF AUGUST, 1884.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Sums.
Aug. 1,	...	...	...	...	...	...	...	...	...	...	0·015	...	...	...	...	...	...	...	...	...	...	...	...	...	0·015
„ 2,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 3,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 4,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 5,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 6,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 7,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 8,	..	0·200	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·200
„ 9,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 10,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 11,	...	...	...	...	...	0·170	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·045	0·215
„ 12,	...	...	...	...	...	...	...	...	...	...	...	...	0·145	...	...	0·055	...	...	...	...	...	...	...	...	0·200
„ 13,	...	0·155	0·410	0·790	0·045	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·385	0·015	...	...	1·800
„ 14,	...	0·265	0·055	0·040	0·065	0·050	0·025	0·030	0·120	...	...	...	...	...	...	...	...	...	...	...	0·100	0·280	...	...	1·060
„ 15,	...	...	0·020	0·345	0·095	...	...	0·015	0·010	0·015	0·035	0·130	0·080	0·010	...	0·100	0·265	0·835	0·140	0·150	0·050	...	...	0·090	2·295
„ 16,	...	...	0·015	...	...	...	0·295	0·140	0·070	0·090	0·025	0·010	0·005	...	...	...	...	...	...	0·020	0·185	0·140	0·015	...	1·010
„ 17,	...	...	...	...	...	...	...	...	0·025	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·025
„ 18,	...	...	0·055	...	...	...	0·005	0·140	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·200
„ 19,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 20,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 21,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·275	...	...	...	0·275
„ 22,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 23,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 24,	...	...	...	0·200	0·160	0·190	0·050	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·600
„ 25,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 26,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·160	0·160
„ 27,	...	...	...	0·015	0·040	0·385	0·250	0·015	...	...	...	0·020	...	...	...	...	...	0·070	0·110	...	0·075	...	...	0·060	1·070
„ 28,	...	...	0·010	...	0·360	0·210	...	...	...	0·070	0·240	0·030	0·225	0·010	...	...	...	...	...	...	...	...	...	...	1·095
„ 29,	...	0·010	...	...	...	...	...	...	0·025	...	0·110	...	...	...	...	...	...	...	...	...	...	...	...	...	0·145
„ 30,	...	...	...	...	...	...	...	...	...	0·090	0·300	0·060	...	...	...	...	...	...	...	...	...	...	...	...	0·450
„ 31,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sums,	...	0·630	0·563	1·390	0·615	1·005	0·625	0·400	0·250	0·265	0·725	0·250	0·455	0·020	...	0·155	0·265	0·905	0·250	0·170	1·070	0·435	0·015	0·355	10·815

TABLE VII.

DIRECTION AND VELOCITY OF THE WIND, FOR THE MONTH OF AUGUST, 1884.

DATE.	1 a.		2 a.		3 a.		4 a.		5 a.		6 a.		7 a.		8 a.		9 a.		10 a.		11 a.		Noon.		1 p.		2 p.		3 p.		4 p.		5 p.		6 p.		7 p.		8 p.		9 p.		10 p.		11 p.		Midt.		Sums.	Means.
	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.		
August 1,	10	15	10	15	10	15	10	13	9	10	9	7	9	10	8	16	8	17	8	21	9	19	8	22	8	22	9	18	9	17	9	16	10	15	10	14	10	9	11	5	11	4	11	5	11	3	314	13.1
" 2,	11	2	11	2	...	1	...	1	11	2	...	0	11	3	11	3	11	4	18	5	23	8	24	8	11	10	13	4	20	8	21	9	24	7	23	3	...	1	19	5	14	5	14	2	14	2	14	3	98	4.1
" 3,	14	2	...	0	...	0	14	3	14	3	14	2	14	3	14	3	14	3	14	4	15	6	14	9	11	9	11	6	9	10	10	7	...	1	10	4	10	3	15	3	15	3	...	0	114	4.7
" 4,	...	0	...	0	...	1	...	1	...	1	15	2	15	2	15	2	12	2	9	2	12	3	9	3	12	3	8	3	10	3	8	3	13	3	16	3	12	3	16	3	9	3	16	3	16	2	...	0	16	2	...	0	114	4.7
" 5,	...	0	...	1	16	2	...	1	16	2	...	0	...	1	14	3	10	5	25	4	24	6	25	6	25	11	26	9	25	8	17	8	16	9	16	5	16	6	...	1	...	1	...	1	...	1	...	1	92	3.8
" 6,	18	3	18	2	...	1	...	1	16	2	16	2	16	3	16	3	22	5	24	8	24	9	23	10	21	9	25	9	25	11	26	8	22	6	17	2	17	2	17	2	8	4	24	6	27	6	18	5	240	10.0
" 7,	20	2	20	4	17	3	...	1	17	2	17	2	17	5	10	5	6	5	24	10	27	11	26	9	26	6	22	9	2	2	7	3	7	3	7	3	7	3	8	3	7	6	9	4	9	5	...	1	127	5.3
" 8,	16	10	27	19	27	10	4	5	18	3	9	6	10	6	4	4	28	9	26	11	26	8	25	11	25	11	25	10	24	8	25	5	22	3	17	4	16	2	...	0	...	0	16	2	14	3	...	0	150	6.2
" 9,	11	2	...	1	11	2	...	0	...	1	11	2	...	0	...	1	11	4	26	8	22	9	26	9	25	9	24	10	20	10	16	11	18	7	21	5	18	4	18	3	18	2	30	2	31	2	32	3	...	1	108	4.5
" 10,	...	0	...	0	...	1	...	1	...	0	...	0	...	0	30	2	28	7	26	5	28	5	4	5	10	7	14	6	16	14	16	11	15	12	16	10	15	7	14	5	14	2	14	2	14	4	9	4	113	4.7
" 11,	8	4	14	3	14	2	15	4	16	2	...	1	10	9	9	8	10	6	9	9	9	6	19	7	7	9	8	13	10	5	11	3	15	5	14	3	...	1	...	1	...	1	14	4	15	3	169	4.5
" 12,	19	10	21	14	20	14	21	13	19	13	19	13	20	8	19	7	20	10	29	8	28	12	30	9	30	2	26	2	20	4	20	7	22	5	22	6	17	4	17	5	17	3	18	3	9	4	9	5	179	7.5
" 13,	8	4	32	9	28	21	4	9	32	4	32	2	...	1	32	3	7	3	8	3	12	7	16	9	16	10	17	8	16	10	15	10	15	8	18	6	9	9	9	9	13	8	2	4	10	8	10	6	171	7.1
" 14,	6	6	12	7	15	6	2	6	7	4	8	4	15	9	15	7	13	4	16	5	16	3	14	3	31	5	7	7	9	9	12	10	8	10	9	12	8	8	8	7	8	12	8	11	12	4	7	2	161	6.7
" 15,	...	1	8	3	9	8	8	7	5	2	7	1	8	13	10	9	12	1	16	1	8	5	5	2	3	3	37	4	28	2	20	2	20	9	18	23	21	8	17	3	19	14	18	12	19	9	20	7	158	6.6
" 16,	15	6	15	7	17	9	15	14	15	13	15	11	18	23	18	15	18	16	18	12	23	16	23	14	26	7	25	8	26	7	25	6	27	5	28	2	28	2	28	2	18	5	10	5	7	7	9	5	217	9.0
" 17,	5	9	6	8	9	9	9	7	8	8	7	6	10	6	16	7	16	10	10	4	5	2	22	5	16	7	18	9	18	12	18	15	18	12	17	10	17	5	16	6	16	4	16	4	8	5	176	7.3
" 18,	8	4	8	5	8	4	8	2	8	5	8	4	7	6	7	6	8	8	14	7	15	13	13	12	15	9	14	11	13	11	10	11	9	12	9	12	9	6	9	7	10	8	10	9	10	8	9	7	189	7.9
" 19,	9	7	10	10	9	7	9	6	7	7	6	7	6	9	7	11	8	11	8	13	9	15	9	14	10	16	10	19	9	23	9	22	10	19	9	15	10	11	8	11	8	10	8	10	8	8	8	6	287	12.0
" 20,	7	5	7	2	6	2	5	4	8	2	8	2	4	2	6	2	14	2	20	5	22	9	24	10	21	13	23	15	23	12	24	14	24	13	24	8	24	8	32	12	8	10	16	18	9	10	9	10	188	7.8
" 21,	8	14	9	7	9	10	8	10	8	3	31	2	29	6	24	8	32	16	32	10	30	8	30	14	30	20	31	18	30	13	31	10	30	10	32	7	32	10	5	14	4	25	2	7	6	4	23	6	252	10.5
" 22,	29	7	26	9	27	18	26	17	28	20	26	14	25	15	26	18	26	19	24	16	24	17	23	13	23	12	19	11	18	15	18	21	19	12	19	15	20	6	22	4	30	2	4	3	6	2	3	4	290	12.1
" 23,	...	1	30	2	39	2	3	3	17	6	14	6	14	2	14	2	22	5	24	10	22	13	19	18	19	25	19	25	20	27	19	21	24	15	26	7	22	6	18	4	10	5	7	2	...	0	...	1	208	8.7
" 24,	...	1	7	2	12	3	3	2	11	27	13	28	10	...	1	...	1	39	3	26	8	24	8	23	9	23	10	22	14	22	15	23	14	21	7	24	7	26	2	23	6	26	4	18	4	21	11	22	10	171	7.2
" 25,	24	7	23	10	23	10	22	12	23	7	26	4	27	4	28	6	26	9	21	12	21	12	23	10	23	11	18	11	18	8	24	10	18	8	17	10	19	9	20	6	19	6	17	3	17	4	20	8	197	8.2
" 26,	20	7	21	8	20	7	20	8	19	5	21	5	26	4	26	3	26	6	28	5	25	10	24	8	16	7	17	10	16	12	16	10	16	9	17	8	16	9	16	7	16	8	14	5	32	8	4	8	177	7.4
" 27,	3	4	8	4	4	5	7	8	30	9	30	9	20	8	5	8	9	5	9	6	9	9	22	11	20	5	28	4	20	4	10	6	14	5	8	11	3	8	6	8	7	7	6	5	11	8	8	13	173	7.2
" 28,	7	8	7	8	7	3	16	8	17	13	22	15	17	11	18	16	23	10	8	7	32	7	21	6	21	14	28	5	28	6	24	4	...	1	30	2	7	7	8	10	8	10	8	16	8	11	7	8	246	8.6
" 29,	9	7	6	7	6	8	6	7	7	7	5	7	6	6	7	5	18	9	27	6	29	5	28	5	5	3	10	5	16	5	17	8	16	6	16	6	13	4	12	3	...	1	12	3	12	2	12	2	137	5.3
" 30,	23	6	10	5	14	7	16	3	...	0	14	2	24	6	28	4	26	3	28	7	24	13	20	10	28	5	28	4	27	4	20	7	16	5	16	5	16	4	16	3	16	2	16	2	12	1	114	4.8
" 31,	9	3	5	2	32	2	30	3	...	0	5	3	...	1	6	3	30	1	24	7	22	10	25	14	21	12	22	7	19	8	22	8	19	6	19	3	18	5	19	2	20	4	21	6	23	4	25	4	127	5.3
Sums,	...	158	...	176	...	193	...	190	...	172	...	155	...	174	...	195	...	228	...	213	...	303	...	309	...	303	...	301	...	319	...	313	...	261	...	248	...	181	...	166	...	181	...	159	...	155	...	119	5229	217.8
Hourly Means,	...	5.1	...	5.7	...	6.2	...	6.1	...	5.5	...	5.0	...	5.6	...	6.3	...	7.4	...	7.1	...	9.8	...	10.0	...	9.8	...	9.8	...	10.3	...	10.1	...	8.4	...	8.0	...	5.8	...	5.4	...	5.8	...	5.1	...	5.0	...	4.0	168.7	7.0

TABLE VIII.

MEAN HOURLY COMPONENTS AND MEAN DIRECTION OF THE WIND, FOR AUGUST, 1884.

Hour.	Components (miles per hour).						Direction.
	N	E	S	W	+N-S	+E-W	
1 a.	0.6	2.8	1.3	1.0	— 0.7	+ 1.8	S 67° E
2 „	1.2	2.5	1.4	1.6	— 0.2	+ 0.9	S 77° E
3 „	1.5	2.3	1.6	1.9	— 0.2	+ 0.4	S 63° E
4 „	1.3	2.6	1.7	1.3	— 0.4	+ 1.3	S 72° E
5 „	1.2	1.7	2.0	1.5	— 0.8	+ 0.2	S 15° E
6 „	1.1	1.6	1.5	1.6	— 0.4	— 0.1	S 9° W
7 „	0.5	1.8	2.2	1.6	— 1.7	+ 0.2	S 6° E
8 „	0.9	2.4	2.2	1.7	— 1.3	+ 0.7	S 29° E
9 „	1.6	2.2	1.9	2.8	— 0.3	— 0.6	S 65° W
10 „	1.4	2.1	1.7	3.8	— 0.4	— 1.6	S 78° W
11 „	1.5	2.9	1.3	5.2	+ 0.1	— 2.3	S 93° W
Noon.	1.0	2.6	1.6	5.8	— 0.6	— 3.3	S 79° W
1 p.	1.3	2.4	2.8	4.7	— 1.5	— 2.3	S 56° W
2 „	1.3	2.6	3.5	4.0	— 2.2	— 1.4	S 33° W
3 „	0.9	2.8	4.4	3.8	— 3.5	— 1.0	S 16° W
4 „	0.4	2.3	4.6	4.0	— 4.2	— 1.6	S 22° W
5 „	0.4	2.3	3.9	2.9	— 3.5	— 0.6	S 10° W
6 „	0.4	2.5	4.0	1.8	— 3.6	+ 0.7	S 11° E
7 „	0.6	2.2	2.6	1.1	— 2.1	+ 1.1	S 28° E
8 „	0.8	2.5	1.9	0.7	— 1.1	+ 1.8	S 59° E
9 „	0.7	3.2	2.1	0.7	— 1.4	+ 2.4	S 60° E
10 „	0.5	2.9	1.9	0.5	— 1.4	+ 2.4	S 66° E
11 „	0.5	2.7	1.8	0.7	— 1.3	+ 2.0	S 58° E
Midt.	0.3	2.8	1.0	1.0	— 0.8	+ 1.8	S 66° E
Mean,.....	0.91	2.45	2.31	2.32	— 1.40	+ 0.13	S 9° E

TABLE IX.

DIRECTION AND FORCE OF THE WIND, AT VICTORIA PEAK, AND SEA DISTURBANCE.

Date.	4 a.			10 a.			4 p.			10 p.		
	Direction	Force.	Sea.	Direction	Force.	Sea.	Direction	Force.	Sea.	Direction	Force.	Sea.
1884.												
August 1,.....	...	...	4	SE	4	4	E	4	1	SE	2	
„ 2,.....	...	...	2	S	2	3	S	2	3	S	2	
„ 3,.....	...	...	2	E	2	2	SE	1	2	S	1	
„ 4,.....	...	...	0	E	2	0	SE	2	0	SE	4	
„ 5,.....	...	...	0	N	2	0	S	2	1	S	2	
„ 6,.....	...	...	2	NNW	2	2	S	2	3	SW	2	
„ 7,.....	...	...	2	S	3	2	E	2	0	E	2	
„ 8,.....	...	...	3	W	3	0	S	2	0	S	2	
„ 9,.....	...	...	3	SE	2	2	S	3	2	S	2	
„ 10,.....	...	...	3	SE	1	3	S	4	3	S	2	
„ 11,.....	...	...	0	SE	2	2	SE	3	3	S	3	
„ 12,.....	...	...	3	SSW	3	4	SW	3	4	SW	4	
„ 13,.....	...	...	3	SE	2	3	S	3	3	S	3	
„ 14,.....	...	...	3	S	4	3	SE	3	3	SE	3	
„ 15,.....	...	...	3	E	2	3	S	4	4	S	5	
„ 16,.....	...	...	3	S	5	2	S	5	2	S	5	
„ 17,.....	...	...	2	S	4	3	S	5	3	S	5	
„ 18,.....	...	...	3	S	5	3	S	4	2	S	4	
„ 19,.....	...	...	3	E	3	4	E	4	4	E	3	
„ 20,.....	...	...	3	E	2	3	NW	3	3	E	4	
„ 21,.....	...	...	4	N	5	4	N	5	3	NE	4	
„ 22,.....	...	...	4	NW	4	4	SW	5	3	SW	3	
„ 23,.....	...	...	4	SW	5	4	SW	5	4	SSW	3	
„ 24,.....	...	...	4	W	3	4	SW	4	4	SW	4	
„ 25,.....	...	...	4	SW	4	4	S	3	4	S	5	
„ 26,.....	...	...	4	S	4	4	S	3	3	S	3	
„ 27,.....	...	...	4	S	3	3	S	3	3	S	4	
„ 28,.....	...	...	3	SSW	4	3	W	3	2	SW	4	
„ 29,.....	...	...	1	SW	4	1	SSW	3	0	SW	2	
„ 30,.....	...	...	0	SW	2	0	SW	3	0	SW	3	
„ 31,.....	...	...	2	SSW	3	2	SSW	4	2	SW	4	
Mean,.....	...	...	2.6	S 6° W	3.1	2.6	S 5° W	3.3	2.5	S 1° W	3.2	

TABLE X.

AMOUNT AND CLASSIFICATION OF CLOUDS AND DIRECTION WHENCE COMING.

Date.	4 a.			10 a.			4 p.			10 p.		
	Amount.	Name.	Direction.	Amount.	Name.	Direction.	Amount.	Name.	Direction.	Amount.	Name.	Direction.
1884.												
Aug. 1, ...	2	nim.	ESE	7	c-str. / cum.	SE	2	cum.	ESE	0	...	...
" 2, ...	0	...	...	6	c-str. / cum.	E / ENE	3	c-cum. / cum.	ENE / ENE	6	c-cum.	NE
" 3, ...	0	...	...	5	c-cum. / cum.	NNE / ENE	8	c-str. / sm-cum.	NE / NE	8	sm-cum. / cum.	ENE / S
" 4, ...	0	...	...	2	cum.	E	1	c-cum. / cum.	ENE / E	0	...	...
" 5, ...	0	...	...	3	cum.	ENE	1	cum.	ENE	0	...	...
" 6, ...	5	cum.	ENE	1	cum.	ENE	1	c-cum. / cum.	ENE	10	str-cum. / cum.	NE / WNW
" 7, ...	10	c-cum. / cum-nim.	NE / WNW	7	sm-cum. / cum-str.	ENE / ENE	10	nim.	...	9	c-str. / cum-str.	NW / NE
" 8, ...	10	cum.	SE	9	sm-cum. / cum.	SE	7	sm-cum. / cum-str.	ESE / SE	1	sm-cum.	E
" 9, ...	0	...	...	1	cum.	ESE	1	c-str. / cum-str.	E / NW	1	sm-cum.	W
" 10, ...	3	cum.	SW	5	cum-str.	ESE	5	c-cum. / cum-str.	WNW / SSE	1	cum-str.	SE
" 11, ...	8	nim.	SSW	9	c-cum. / nim.	SE / SSW	7	c-cum. / cum-str.	ESE / W	7	cum.	WSW
" 12, ...	9	str.	...	9	c-cum. / nim.	ENE / WSW	9	c-cum. / nim.	ENE / SW	1	cum-str.	WSW
" 13, ...	10	nim.	SW	7	c-str. / cum.	NE / SW	9	c-str. / cum-str.	NNE / SSW	6	nim.	SSE
" 14, ...	10	cum-nim.	S	10	str. / cum-nim.	S	9	c-cum. / cum.	E / SSE	10	nim.	SE
" 15, ...	10	nim.	...	10	nim.	SSW	10	nim.	SW	10	nim.	SSW
" 16, ...	10	nim.	SSW	10	nim.	SW	10	str. / cum-nim.	SW	10	nim.	...
" 17, ...	10	nim.	SW	9	str. / cum-nim.	S	10	nim.	SSW	6	cum-nim.	SSE
" 18, ...	3	cum.	S	4	cum.	SSE	4	cum.	SSE	0	...	...
" 19, ...	2	sm-cum.	ESE	3	cum.	E	1	cum.	E	1	cum.	E
" 20, ...	1	cum.	...	0	...	...	0	...	...	7	nim.	ENE
" 21, ...	6	cum-nim.	...	4	c. / cum.	E / NNE	7	c-cum. / cum.	ENE / NNE	9	cum-nim.	NNE
" 22, ...	10	nim.	WNW	7	c-str. / cum.	WNW	10	str.	...	1	cum-str.	...
" 23, ...	10	nim.	W	5	c. / cum.	ENE / W	9	c-str. / cum-str.	NW / W	6	str.	...
" 24, ...	10	nim.	WSW	6	c. / cum.	NW / WNW	6	c. / cum.	WNW / W	1	cum.	W
" 25, ...	2	sm-cum.	WSW	5	cum.	SW	5	c-cum. / cum-str.	WNW / W	2	cum.	WSW
" 26, ...	0	...	...	6	c-cum. / cum.	NW / SSW	7	c-cum. / cum.	NNW / SW	9	cum-nim.	SW
" 27, ...	10	cum-nim.	S	9	sm-cum. / cum.	WNW / S	10	cum. / c-cum. / cum.	W / SSW	10	nim.	S
" 28, ...	8	cum-nim.	SW	10	nim.	SW	10	str. / cum-nim.	SW	8	cum. / c-str.	SSW / ENE
" 29, ...	9	cum-nim.	SSW	10	cum-nim.	SSW	10	c-cum. / cum.	ENE / SW	6	c-cum. / cum.	SE / SSW
" 30, ...	4	cum.	SE	9	cum. / cum-nim.	SSW	3	c-cum. / cum.	ENE / SSW	2	c-str. / sm-cum.	ENE / SSW
" 31, ...	4	cum.	SW	7	c-str. / cum.	NE / SW	5	c-str. / cum.	NE / SW	7	c-str. / cum.	NNE / SW
Mean, ...	5.7	...	...	6.3	...	...	6.1	...	...	5.0	...	...

TABLE XI.

VICTORIA PEAK.

Date.	Barometer.			Temperature.						
	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.	Sun.	Max.	Min.	R.
1884.	ins.	ins.	ins.	°	°	°	°	°	°	
Aug. 1,.....	28.000	27.955	27.956	72.8	74.4	72.8	141.0	74.9	69.0	0
„ 2,.....	27.975	27.904	27.899	74.4	75.0	73.8	142.0	75.9	71.0	0
„ 3,.....	27.918	27.821	27.805	77.0	76.0	75.2	145.0	77.9	72.0	0
„ 4,.....	27.870	27.818	27.800	76.4	76.2	72.8	142.0	76.9	69.0	0
„ 5,.....	27.854	27.804	27.849	74.6	76.8	73.8	140.0	78.5	71.0	0
„ 6,.....	27.846	27.802	27.851	76.8	79.4	76.6	147.0	80.9	72.0	0
„ 7,.....	27.886	27.816	27.867	74.8	76.2	76.8	145.0	78.9	73.0	0
„ 8,.....	27.890	27.869	27.885	74.8	75.8	73.8	141.0	77.9	72.0	0
„ 9,.....	27.885	27.848	27.889	76.2	75.8	74.0	146.0	77.9	72.0	0
„ 10,.....	27.880	27.896	27.914	74.8	74.8	75.8	141.0	78.3	72.8	0
„ 11,.....	27.951	27.920	27.935	74.8	76.2	74.6	121.0	76.7	71.8	0
„ 12,.....	27.964	27.906	27.897	74.4	74.6	74.8	140.0	75.9	73.0	0
„ 13,.....	27.926	27.894	27.889	75.6	75.2	73.8	142.0	76.9	73.0	0
„ 14,.....	29.925	27.881	27.915	70.2	73.8	74.6	135.8	75.9	70.0	0
„ 15,.....	27.952	27.900	27.929	71.6	72.0	73.0	95.8	73.9	67.0	0
„ 16,.....	28.020	27.984	27.994	73.2	71.8	71.8	90.0	73.3	71.0	0
„ 17,.....	28.006	27.965	27.970	72.2	74.6	73.8	144.0	74.7	70.0	0
„ 18,.....	28.008	27.982	28.023	73.8	74.8	74.8	142.2	77.9	70.0	0
„ 19,.....	28.055	28.023	28.076	74.8	75.8	74.8	144.8	77.7	73.0	0
„ 20,.....	28.046	27.958	27.974	77.0	80.6	76.0	140.0	80.9	72.0	0
„ 21,.....	27.888	27.795	27.794	79.2	82.0	75.8	144.0	82.9	74.0	0
„ 22,.....	27.792	27.815	27.910	75.4	76.2	75.8	140.2	78.9	73.0	0
„ 23,.....	27.956	27.916	27.958	76.0	75.8	75.0	130.0	76.9	74.0	0
„ 24,.....	27.967	27.923	27.932	73.8	74.8	75.0	140.0	77.3	71.0	0
„ 25,.....	27.982	27.936	27.935	74.8	75.8	74.2	125.0	76.7	73.0	0
„ 26,.....	28.011	27.971	28.004	75.8	76.2	74.8	145.8	79.1	73.0	0
„ 27,.....	28.036	27.975	28.023	73.8	73.8	74.8	149.0	76.7	69.0	0
„ 28,.....	28.068	28.033	28.080	73.8	72.8	73.8	86.0	75.9	72.0	0
„ 29,.....	28.101	28.065	28.087	72.8	74.8	74.8	134.0	76.9	72.8	0
„ 30,.....	28.074	27.995	28.027	74.8	74.8	74.8	149.0	76.9	70.0	0
„ 31,.....	28.038	27.976	27.980	73.8	74.8	73.8	144.0	75.3	72.1	0
Mean,.....	27.960	27.914	27.937	74.7	75.5	74.5	134.9	77.3	71.6	0

TABLE XII.

TEMPERATURE.

Date.	Cape d'Aguilar.					
	4 a.	10 a.	4 p.	10 p.	Max.	Min.
1884.	°	°	°	°	°	°
Aug. 1,.....	78.8	82.6	80.6	78.8	84.8	78.8
„ 2,.....	77.8	79.6	83.0	78.6	86.2	76.6
„ 3,.....	77.1	85.0	83.6	78.6	85.2	77.1
„ 4,.....	77.6	83.2	84.6	78.6	88.0	76.6
„ 5,.....	76.6	85.3	85.6	79.2	87.2	76.6
„ 6,.....	78.1	83.6	86.6	81.6	86.8	78.1
„ 7,.....	80.6	86.6	82.6	80.0	88.0	80.0
„ 8,.....	77.6	84.3	82.9	79.6	86.8	77.6
„ 9,.....	78.6	83.6	85.1	79.6	87.3	78.6
„ 10,.....	78.6	86.6	85.0	80.6	88.2	78.6
„ 11,.....	79.6	79.8	85.1	81.2	87.4	77.8
„ 12,.....	80.6	83.8	84.2	79.6	87.1	79.6
„ 13,.....	80.9	85.1	83.0	78.6	87.0	78.6
„ 14,.....	76.8	77.6	83.1	77.1	83.8	76.8
„ 15,.....	76.6	76.8	78.6	77.1	80.6	75.6
„ 16,.....	78.6	74.8	79.6	75.6	80.5	74.8
„ 17,.....	77.6	77.6	81.8	79.7	82.8	75.8
„ 18,.....	78.6	84.1	83.1	79.6	87.0	78.6
„ 19,.....	79.6	81.8	81.6	80.8	82.8	79.6
„ 20,.....	78.1	86.8	88.6	80.9	90.8	78.1
„ 21,.....	80.6	87.6	91.1	77.6	92.3	76.9
„ 22,.....	79.3	85.6	84.8	80.6	87.8	76.1
„ 23,.....	81.6	85.6	85.6	79.6	87.8	76.1
„ 24,.....	80.6	80.1	81.6	81.2	86.8	80.1
„ 25,.....	80.3	85.5	85.6	81.0	87.8	79.1
„ 26,.....	79.8	85.6	86.6	79.8	88.2	76.6
„ 27,.....	80.4	82.6	82.1	79.8	84.8	75.1
„ 28,.....	81.1	81.9	77.6	76.8	82.8	76.8
„ 29,.....	76.6	82.4	84.0	79.6	86.8	77.1
„ 30,.....	78.0	84.2	84.6	79.9	86.8	78.0
„ 31,.....	79.8	84.8	84.6	79.9	87.2	79.1
Mean, ...	78.9	83.0	83.8	79.4	86.4	77.5

TABLE XIII.

RELATIVE HUMIDITY.

Date.	Observatory.			Cape d'Aguilar.				Victoria Peak.		
	10 a.	4 p.	10 p.	4 a.	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.
1883.										
1	78	68	84	86	85	84	88	95	83	95
2	70	67	87	92	100	79	91	92	91	91
3	74	77	86	94	79	77	90	91	93	89
4	74	58	84	91	82	74	84	83	86	86
5	72	59	80	93	80	70	83	91	82	93
6	70	63	84	91	87	79	93	86	89	95
7	78	81	91	89	83	89	93	99	89	95
8	80	67	87	90	79	79	91	95	86	95
9	75	63	82	92	85	79	89	78	91	85
10	71	65	84	90	84	81	88	91	91	93
11	79	74	83	89	90	81	92	95	89	95
12	75	81	87	93	84	83	98	96	96	95
13	82	76	92	91	85	87	93	95	94	95
14	91	76	93	96	93	87	99	97	98	95
15	87	87	91	97	100	94	97	97	99	94
16	92	82	93	90	100	94	97	93	95	98
17	89	76	90	93	98	92	92	97	95	99
18	79	71	89	93	83	85	89	95	86	95
19	77	71	89	90	88	85	91	95	91	95
20	64	72	73	97	73	78	78	91	86	82
21	67	54	74	85	76	65	97	85	71	82
22	71	67	85	89	76	84	98	84	91	95
23	85	68	82	98	88	81	89	99	97	89
24	79	79	85	88	91	89	83	90	99	89
25	75	69	85	94	81	82	91	99	94	98
26	73	68	84	96	85	79	92	91	89	99
27	86	77	92	92	89	87	91	99	99	98
28	89	89	90	91	87	96	92	99	90	99
29	84	74	90	97	85	83	93	99	99	99
30	79	69	91	91	82	81	91	95	86	99
31	80	66	83	94	88	81	91	99	91	95
Mean	78	71	86	92	86	83	91	93	91	94

TABLE XIV.

TENSION OF AQUEOUS VAPOUR EXPRESSED IN INCHES OF MERCURY.

Date.	Observatory.			Victoria Peak.		
	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.
1883.						
1	0.867	0.881	0.849	0.765	0.705	0.765
2	0.816	0.855	0.886	0.783	0.781	0.752
3	0.878	0.912	0.883	0.848	0.836	0.782
4	0.862	0.831	0.855	0.758	0.784	0.696
5	0.862	0.806	0.839	0.781	0.755	0.775
6	0.801	0.901	0.961	0.791	0.896	0.878
7	0.910	0.879	0.969	0.860	0.802	0.876
8	0.874	0.787	0.890	0.819	0.766	0.792
9	0.824	0.904	0.869	0.699	0.807	0.711
10	0.825	0.924	0.904	0.779	0.779	0.834
11	0.907	0.934	0.917	0.819	0.802	0.821
12	0.872	1.004	0.930	0.824	0.829	0.826
13	0.965	0.953	0.900	0.849	0.822	0.792
14	0.875	0.908	0.862	0.721	0.815	0.821
15	0.893	0.885	0.876	0.757	0.782	0.762
16	0.858	0.849	0.836	0.759	0.739	0.770
17	0.880	0.912	0.923	0.772	0.821	0.832
18	0.919	0.928	0.913	0.792	0.740	0.826
19	0.902	0.919	0.941	0.819	0.807	0.819
20	0.783	0.976	0.786	0.848	0.897	0.732
21	0.854	0.787	0.781	0.846	0.777	0.741
22	0.825	0.871	0.932	0.739	0.825	0.848
23	0.973	0.913	0.866	0.887	0.863	0.777
24	0.822	0.903	0.890	0.759	0.860	0.777
25	0.883	0.768	0.928	0.860	0.814	0.827
26	0.914	0.919	0.951	0.807	0.802	0.860
27	0.919	0.924	0.928	0.824	0.832	0.843
28	0.944	0.860	0.866	0.832	0.726	0.832
29	0.820	0.945	0.924	0.801	0.852	0.860
30	0.922	0.885	0.932	0.819	0.740	0.860
31	0.893	0.855	0.885	0.832	0.779	0.792
Mean	0.876	0.893	0.892	0.802	0.801	0.802

TABLE XV.

RAINFALL AT DIFFERENT STATIONS.

Date.	Observatory.		Stone Cutters' Island.	Victoria Peak
	Amount.	Duration.	Amount.	Amount.
1884.	ins.	hrs.	ins.	ins.
Aug. 1,.....	0.015	1	...	...
" 2,.....	...	0	...	...
" 3,.....	...	0	...	...
" 4,.....	...	0	...	...
" 5,.....	...	0	...	...
" 6,.....	...	0	...	...
" 7,.....	0.200	2	0.26	...
" 8,.....	...	0	...	...
" 9,.....	...	0	...	...
" 10,.....	0.170	1	0.08	0.30
" 11,.....	0.045	1	...	...
" 12,.....	1.600	5	4.30	1.35
" 13,.....	1.080	8	1.62	1.11
" 14,.....	0.785	6	0.25	0.10
" 15,.....	2.500	15	2.34	3.36
" 16,.....	0.425	7	0.55	0.64
" 17,.....	0.200	2	0.16	0.20
" 18,.....	...	0	...	...
" 19,.....	...	0	...	...
" 20,.....	...	0	...	...
" 21,.....	0.275	1	0.06	0.30
" 22,.....	...	0	...	...
" 23,.....	0.600	4	1.20	0.16
" 24,.....	...	0	...	...
" 25,.....	...	0	...	...
" 26,.....	0.895	1	2.14	0.16
" 27,.....	0.865	5	0.56	0.74
" 28,.....	0.600	1	0.87	0.65
" 29,.....	0.420	2	0.26	...
" 30,.....	0.140	1	0.31	0.10
" 31,.....	0.025	1	0.20	...
Total,.....	10.840	70	15.16	10.67

Hongkong Observatory, 3rd April, 1885.

W. Doberck
Government Astronomer

HONGKONG OBSERVATORY.

Weather Report for September, 1884.

In the *China Coast Meteorological Register*, based on information transmitted by the Great Northern and the Eastern Extension Telegraph Companies—which I have published daily, is given a summary of the atmospheric circumstances in Manila and along the Coast of China between Haiphong and Shanghai. It also contains information concerning the weather in Nagasaki and Wladivostock and the first appearance and progress of Typhoons.

On the 29th and 30th August a depression travelling towards E passed across Northern China between Shanghai and Chefoo with a NE gale at Shantung Promontory on the latter day. It was perhaps the existence of that depression, that caused the next Typhoon to pass straight northwards, while yet SE of Formosa. On the 30th August I wrote in the *China Coast Meteorological Register*: "the winds are light at present, but it is probable, that another depression is being formed far in the East." It would appear that Typhoon XI was at the time situated in 16° N, 128½° E or thereabouts. It was moving northwards. The barometer had fallen nearly a tenth of an inch at S Cape and also in Manila. In the former place it was calm. In the latter there blew a light WNW breeze. At 10 a. on the 31st it appears to have been in about 19° N, 127° E. The barometer was now falling along the southern coast of China, but no strong winds were recorded. Gentle SW breezes blew in the Formosa Straits. At 10 a. on the 1st it was probably in 23° N, 126½° E. I notified at the time, that it appeared to have moved northwards. The S.S. *Thibet* at noon on the 1st in 26° 55′ N, 122° 51′ E. experienced a strong N by E breeze, a falling barometer, frequent squalls of wind and rain, and later in the afternoon a high E swell. Early the following morning the wind veered and increased to a fresh gale with various squalls and a very high sea at 6 a. At noon in 28° 49′ N, 124° 33′ E, a storm blew from NNW but veered quickly through W to SW. In the evening the barometer rose quickly with a whole gale from SW, the squalls were less violent and the sea less high.

In Shanghai and elsewhere the wind was moderate, but it rained in the evening of the 2nd. At the North Saddle Lighthouse it blew a strong NE breeze on the 1st which increased to a moderate NNE gale with mist in the early morning hours of the 2nd. In the afternoon it blew a strong NE gale with wet weather. On the morning of the 3rd the gale backed to W and moderated. In the evening it blew a light SW breeze.

H.M.S. *Flying Fish* off the SW coast of Corea encountered very heavy squalls with rain on the morning of the 3rd and a fresh SW gale in the afternoon.

At 10 a. on the 2nd the center of the Typhoon must have been about 27° 12′ N, 125° 51′ E, and at 10 a. on the 3rd in 32° 34′ N, 125° 38′ E. The Typhoon appears to have then rather suddenly turned towards NE and after skirting the southern coast of Corea to have entered and traversed the Sea of Japan. At 6 a. on the 4th Mr. KNIPPING wrote on the weather map issued from the Imperial Meteorological Observatory, Tokio: "a depression is moving E in the Southern sea of Japan with the lowest barometer 29.80 at Sakai, etc.," at 2 p: "the center of the depression lies off Sado, the barometer falling in the whole E, rising in Western Nippon, etc.," at 9 p.: "the center has moved NE and is slightly deeper, Akita reporting the lowest reading 29.65 etc.," at 6 a. on the 5th: "the center has made slow progress, it is near Aomori deeper (29.49) and will probably cross to the E etc.," at 2 p: "the center is passing slowly to the E coast (Aomori 29.49) etc.," at 9 p: "the depression in N Eastern Nippon has almost disappeared and pressure has risen generally etc.." From the *Tridaily Weathermaps* it appears that the center was in 37° 15′ N, 133° 12′ E at 6 a. on the 4th, in 38° 40′ N, 137° 0′ E at 2 p., in 39° 0′ N, 139° 6′ E at 9 p., in 41° 0′ N, 142° 0′ E at 6 a. on the 5th. It then proceeded eastwards.

Meantime light winds and fine weather reigned over southern China and neighbouring seas. In Manila as far as can be judged from the 10 a. and 4 p. telegraphic reports the barometer reached its maximum as early as the 3rd. Fine weather with gentle or moderate WSW breezes prevailed till the 4th, at 4 p. on which day the barometer stood at 29.67. In Hongkong the barometer reached its maximum in the afternoon on the 4th. Light winds with fine but close, oppressive and increasingly hot weather continued afterwards. On the 5th there was a fall of a few hundredths of an inch in the

barometer all over the Far East from Manila to Wladivostock. On the 4th and the 5th gentle E breezes are reported by ships in the China Sea between 12° and 17° N. On the 6th the wind backed to NE in those latitudes, the fall in the barometer continued and is particularly noticeable at S. Cape, where it at 10 a. had fallen 0.08 inches since previous day. A gentle NNE breeze on the 5th increased to a strong breeze at midnight on the 7th and on the morning of the 8th. The weather had been fine and warm but on that day mist and rain set in.

On the 6th I remarked in the *China Coast Meteorological Register*, that the barometer was falling especially in the SE. The center of Typhoon XII was then East of Manila. At 10 a. on the 7th it may have been in 17° N, 125½° E. At the latter hour gentle NE breezes began to prevail along the SE coast of China and c-cum from N were observed the same day in Hongkong.

At 10 a. on the 8th the center appears to have been near the NE point of Luzon, in about 18° N, 123° E. A strong NNE breeze with misty weather blew at S. Cape, Formosa, a light W breeze with rain in Manila. Fresh northerly breezes with a swell in the sea from NE are reported by ships in the China Sea. Moderate N breezes with detached clouds prevailed in the Formosa Straits. Along the southern coast of China the sky was blue and the barometer had fallen about 0.05 inches. At S. Cape it had fallen 0.20 inches.

At 10 a. on the 9th the center appears to have been in 18° 30′ N, 120° 15′ E. It had apparently taken some time to cross the northern part of Luzon. A moderate NE gale with gloomy weather, mist and rain is reported from S. Cape. A moderate SSW breeze with mist from Manila, where the barometer had fallen to 29.65. Moderate NNW gales and rain with a high sea are reported by ships between Manila and Hongkong. Fresh NE breezes blew along the SE coast of China, where the barometer had fallen over a tenth of an inch and the sky had become overcast. A fresh NE gale is reported from the northern entrance of the Formosa Straits. The German Bark *Johanna*, at noon in 17° 41′ N, 115° 37′ E registered the barometer at 29.49 (reduced). By steering towards SSW, Captain BANNAU avoided the Typhoon.

At 10 a. on the 10th the center appears to have been in 19° 23′ N, 116° 0′ E. A gentle SE breeze with rising barometer, but gloomy and misty weather is reported from S. Cape. A gentle SSW breeze from Manila, where the barometer had risen to 29.80. Strong NE breezes blew in the Formosa Straits, a fresh N gale in Hongkong. Moderate NW breezes with blue sky in Tonquin. At noon the *Johanna* in 16° 48′ N, 116° 48′ E experienced a moderate SSW gale with very high sea and squally weather and barometer 29.61 (reduced). The American ship *C. F. Sargent*, nearer Hongkong, encountered the full violence of the hurricane, blowing steadily from WNW between 6 p. and midnight. The barometer rose subsequently and the wind blew from SW with moderate force.

At 4 p. on the 10th the center was in 20° 5′ N, 114° 57′ E, moving N-Westward. At about 2 a. next morning it appears to have been within 47 miles SW of Hongkong and to have shortly afterwards passed within about 16 miles SW of Macao. The French Transport *Drac* at anchor north of St. John's Island was within 38 miles of the center, which passed in the NE. about 5 a., but did not experience above a moderate gale in this sheltered position. While passing between these places the center appears to have been moving N 33° W at a rate of 34½ miles an hour. The isobars appear to have been elongated in the direction of the track of the center; gradients were evidently much stronger NE of the center, particularly in the part that crossed this Colony. Here some damage was done, particularly on shore, by the heavy rain, notwithstanding the warnings issued.

Those issued in connection with Typhoon XII are set forth in my report of the 24th September (Appendix G). The table appended to that report exhibits the great fall of temperature, which, although principally due to the dense layer of clouds and to the rain, may have been partly effected by the sudden diminution of pressure and consequent expansion of the air, as suggested by HANN in his now famous paper on the change of temperature in ascending currents of air. It is noteworthy, that the relative humidity never rose to saturation in spite of the uninterrupted deluge of rain. The velocity of the wind was tabulated from the anemogram as explained in my Annual Report. It was found impossible to record the hourly direction of the clouds, and unfortunately the upper clouds cannot be observed near the center, owing to the presence and density of the lower clouds which surrounded the center and stretched out to a distance of 350 miles to the W and N of it. The area of heavy rain appears to have reached 160 miles in front of the center, and the fall to have been greatest where the wind was strongest, but not to have extended so far towards SW. In Macao 2.48 inches of rain were measured on the 10th, 6.41 on the 11th and 1.27 on the 12th.

The angle of the wind with the gradient or rather with the straight line between the observer and the center was 32° in the advancing semicircle and 57° in the rear. The mean of all the observations discussed was 44°. This agrees with the result obtained from the typhoon of the 22nd August, but could in this instance not be so accurately determined as in case of that typhoon. The angle being so much smaller in front than in the rear would at first sight seem abnormal, but it should be remembered, that the winds in front were on the whole off-shore winds, and therefore subject to greater friction than the winds behind the center, which on the whole had passed over a great expanse of ocean and were subject to less friction. The off-shore winds may also have been to some extent influenced by the Canton River.

The following meteorological observations were made in Macao, where the sky remained densely
rcast during the entire course of the disturbance. The central calm must therefore in this instance
e been very limited in extent:—

ate.	Hour.	Barometer red. to 32° and M.S.L.	Temperature.	Rel. Humidity.	Rain.	Wind. Direction.	Wind. Force.
884:		ins.	°	%	ins.		
. 10.	1 a.	29.549	...	...	...	N	3
"	2 "	.532	...	...	...	N	5
"	3 "	.519	...	...	...	N	4
"	4 "	.510	83	80	...	N	3
"	5 "	.516	...	...	...	N	3
"	6 "	.520	...	...	...	NNE	3
"	7 "	.520	...	...	...	NNE	4
"	8 "	.533	...	...	...	NNE	4
"	9 "	.525	...	...	...	N	5
"	10 "	.515	83	73	...	N	5
"	11 "	.489	83	74	...	N	5
"	Noon.	.483	82	80	...	N	5
	1 p.	.462	80.5	81	0.024	N	6
	2 "	.429	80	83	...	N	6
	3 "	.388	80.5	79	0.008	N	6
	4 "	.364	80.5	79	...	N	7
	5 "	.352	79.5	83	...	N	7
	6 "	.319	79	82	...	N	7
	7 "	.302	79	87	...	N	7
	8 "	.291	79	87	0.134	N	7
	9 "	.278	79	85	0.047	N	8
	10 "	.268	78	89	0.606	N	8
	11 "	.183	78	89	0.127	N	8
	Midt.	.145	77.5	91	1.236	N	9

Date.	Hour.	Barometer red. to 32° and M.S.L.	Temperature.	Rel. Humidity.	Rain.	Wind. Direction.	Wind. Force.
1884.		ins.	°	%	ins.		
Sep. 11.	1 a.	29.036	77	95	1.732	N	10
" "	2 "	29.005	76	95	1.969	NNE	7
" "	3 "	28.930	78	95	1.339	ENE	7
" "	4 "	.932	77.5	93	...	E	6
" "	5 "	.930	78	87	0.063	E	6
" "	6 "	28.982	78.5	97.5	...	ESE	5
" "	7 "	29.022	...	...	...	ESE	4
" "	8 "	.098	...	...	...	ESE	3
" "	9 "	.174	...	...	...	SSW	4
" "	10 "	.253	77	95	0.355	SSW	5
" "	11 "	.324	...	...	...	SSW	5
" "	Noon.	.366	...	...	...	SSW	4
" "	1 p.	.392	77	91	0.355	SSW	4
" "	2 "	...	...	...	...	...	...
" "	3 "	...	...	...	...	...	...
" "	4 "	.440	77	91	0.118	SSW	3
" "	5 "	...	...	...	...	...	...
" "	6 "	...	...	...	...	...	...
" "	7 "	...	...	...	...	...	...
" "	8 "	...	...	...	...	...	...
" "	9 "	...	...	...	...	...	...
" "	10 "	...	...	...	...	...	...
" "	11 "	...	...	...	...	...	...
" "	Midt.	...	...	...	...	...	...

The following observations were made on board the French Transport *Drac* at anchor north of
t. John's Island in 21° 44′ N, 112° 44′ E, but the index correction applied to the aneroid barometer
s very uncertain. It rained since noon on the 10th:—

Date.	Hour.	Barometer.	Temperature.	Wind. Direction.	Wind. Force.	Clouds. Amount.	Clouds. Direction.
1884.		ins.	°				
Sep. 10.	2 a.	29.59	79	N	3	10	N
" "	4 "	.57	79	N	3	10	N
" "	6 "	.59	82	N	3	10	N
" "	8 "	.60	84	N	4	10	N
" "	10 "	.60	84	N	3	10	NNW
" "	Noon.	.57	84	NNW	4	10	NNW
" "	2 p.	.54	81	NNW	4	10	NNW
" "	4 "	.50	80	NW	4	10	NNW
" "	6 "	.48	79	NNW	5	10	NNW
" "	8 "	.47	79	NW	6	10	NW
" "	10 "	.43	78	NW	6	10	NW
" "	Midt.	.35	78	NW	5	10	NW

Date.	Hour.	Barometer.	Temperature.	Wind. Direction.	Wind. Force.	Clouds. Amount.	Clouds. Direction.
1884.		ins.	°				
Sep. 11.	2 a.	29.27	78	NW	5	10	NW
" "	4 "	.22	78	NW	6	10	NW
" "	6 "	.19	77	WNW	7	10	WNW
" "	8 "	.24	77	W	6	10	W
" "	10 "	.31	78	WSW	6	10	WSW
" "	Noon.	.37	79	SW	5	10	SW
" "	2 p.	.41	77	SW	5	10	SW
" "	4 "	.42	76	SW	4	10	SW
" "	6 "	.47	76	SW	4	10	SW
" "	8 "	.53	75	SW	3	10	SW
" "	10 "	.59	76	SW	3	10	SW
" "	Midt.	.60	75	SW	3	8	SW

On the 10th a fresh NE gale was felt throughout the day with gloomy and wet weather and a heavy sea at Breaker Point and during the latter part of the day even in Swatow with uninterrupted rain, though only an inch was collected at 9 a. on the 11th. From the lighthouses in the comparatively narrow northern entrance of the Formosa Straits a fresh NNE breeze on the 7th increased to a fresh or strong NE gale on the 9th. The NE gale decreased in force in the morning on the 10th. There does not appear to have fallen much rain so far north of the center but these registers exhibit another instance of the force of NE winds consequent on the passage of a typhoon several hundred miles to the south. The Straits at all times exercise a powerful deflecting influence on the direction of the wind, which is evidently increased by the chain of high mountains running from north to south in Formosa. Along the southern coast of China fresh or strong winds blow straight from East under similar circumstances.

The strongest wind reported from Takow was a strong SSE gale at 3 h. 30 m. p. on the 10th. This station is however particularly unfavourably situated for observations of the wind, which appears to be very local. From Fisher Island no wind above a fresh breeze and apparently not much rain is reported.

From Kiungchow, Hainan, the lowest barometer is reported on the morning of the 11th with gloomy weather. The wind, a strong W breeze, reached at the same time its maximum, but no rain till later in the day is reported. A fresh or strong NNW breeze is at the same time reported from Pakhoi and a moderate NW breeze with blue sky and remarkable dryness in the air from Haiphong.

At 10 a. on the 11th the center appears to have been in 22° 52′ N, 112° 33′ E, but by this time the disturbance had lost the character of a typhoon. From Manila and from ships in the China Sea a gentle SW breeze accompanied by rain was reported. Gentle E breezes with overcast weather prevailed in the Straits of Formosa and along the coast as far north as Shanghai, in which place the barometer continued high. At S. Cape the breeze was NE and the weather fine. The disturbance appears about this time to have taken a northern course, but no strong winds or unusually heavy rain are reported from inland stations. As early as the 8th I forecast in the *China Coast Meteorological Register*, that this typhoon would move northwards, and in answer to enquiries I stated on the following day, that ships might safely leave for Singapore or Tonquin, but that they would run some danger if steering towards E or NE, and that especially the Formosa Straits were likely to be visited by strong winds and high sea.

At 10 a. on the 12th the center may have been about 26° N, 113½° E and at 10 a. on the 13th in 29° N, 116° E, but it is almost impossible to trace its whereabouts on these days. On the 12th a strong NE breeze with drizzling rain and wet weather next day was experienced in Kiukiang.

At 10 a. on the 14th the center appears to have been about 31° 14′ N, 120° 5′ E. At 6 a. a gentle NW breeze with rain blew at Wuhu, where the barometer had fallen nearly 0.2 inches in the previous 24 hours. At Chinkiang, where it had fallen nearly as much, a moderate NE breeze with overcast and wet weather was registered at the same hour. The typhoon passed north of Shanghai—within perhaps 30 miles—later in the day and proceeded then towards east, as shown by the following observations. On the morning of the 15th another typhoon, whose course may have been influenced by Typhoon XII, made its appearance in the sea south of Hiogo in Japan.

Date.	Sicawei.				Shaweishan.				Gutzlaff.				North Saddle.				Steep Island.			
	Hour.	Barometer.	Wind. Dir.	Wind. Force.	Hour.	Barometer.	Wind. Dir.	Wind. Force.	Hour.	Barometer.	Wind. Dir.	Wind. Force.	Hour.	Barometer.	Wind. Dir.	Wind. Force.	Hour.	Barometer.	Wind. Dir.	Wind. Force.
1881.																				
Sep. 12,	1a.	29.892	ENE	1	3 a.	29.841	E	3	6 a.	29.951	E	3	3 a.	29.951	ENE	1	3 a.	29.885	NE	3
,, ,,	10 ,,	.925	ENE	1	9 ,,	.837	ENE	2	Noon	.952	ENE	2	9 ,,	.921	ENE	1	9 ,,	.867	NE	2
,, ,,	4 p.	.892	E	2	3 p.	.857	ENE	3	6 p.	.925	ENE	3	3 p.	.841	ENE	1	3 p.	.839	E	2
,, ,,	10 ,,	.890	ENE	1	9 ,,	.839	ENE	3	Midt.	.920	ENE	2	9 ,,	.885	ENE	3	9 ,,	.885	NE	2
,, 13.	4a.	.817	ENE	1	3 a.	.851	E	3	6 a.	.880	ESE	1	3 a.	.829	SE	3	3 a.	.869	E	2
,, ,,	10 ,,	.826	E	2	9 ,,	.827	E	3	Noon	.846	ESE	2	9 ,,	.843	ESE	3	9 ,,	.817	E	2
,, ,,	4 p.	.725	E	4	3 p.	.753	E	4	6 p.	.794	ESE	3	3 p.	.744	ESE	4	3 p.	.749	SE	4
,, ,,	10 ,,	.735	E	1	9 ,,	.655	SE	4	Midt.	.767	SE	3	9 ,,	.744	ESE	3	9 ,,	.707	E	1
,, 14,	4a.	.643	SSE	1	3 a.	.665	S	5	6 a.	.710	SSE	3	3 a.	.698	SE	1	3 a.	.699	S	3
,, ,,	10 ,,	.676	SSE	1	9 ,,	.627	SSW	4	Noon	.722	SSE	3	9 ,,	.702	SSW	3	9 ,,	.706	S	3
,, ,,	4 p.	.616	WSW	3	3 p.	.617	SSW	4	6 p.	.692	NNE	2	3 p.	.626	SSW	4	3 p.	.614	S	3
,, ,,	10 ,,	.682	NW	1	9 ,,	.651	N	2	Midt.	.725	E	2	9 ,,	.691	SSW	2	9 ,,	.690	S	3
,, 15,	4 a.	.683	NW	1	3 a.	.639	N	4	6 a.	.742	NNE	2	3 a.	.651	SW	2	3 a.	.732	NW	3
,, ,,	10 ,,	.787	NNW	1	9 ,,	.747	N	1	Noon	.798	N	2	9 ,,	.735	N	3	9 ,,	.746	NW	4
,, ,,	4 p.	.766	NNE	3	3 p.	.651	N	5	6 p.	.808	NNE	3	3 p.	.718	NNE	6	3 p.	.743	NW	4
,, ,,	10 ,,	.841	N	2	9 ,,	.733	N	5	Midt.	.861	NNE	6	9 ,,	.771	NNE	8	9 ,,	.738	N	5
,, 16,	4 a.	.842	NW	1	3 a.	.732	NE	5	6 a.	.851	NNE	6	3 a.	.790	NNE	7	3 a.	.742	N	5
,, ,,	10 ,,	.897	N	3	9 ,,	.833	N	6	Noon	.893	NNE	6	9 ,,	.859	NNE	8	9 ,,	.816	N	5
,, ,,	4 p.	.847	N	3	3 p.	.735	N	6	6 p.	.879	NNE	6	3 p.	.804	NNE	7	3 p.	.776	N	5
,, ,,	10 ,,	.907	NW	2	9 ,,	.810	NNW	5	Midt.	.908	NNE	6	9 ,,	.829	N	7	9 ,,	.831	NW	6
,, 17,	4 a.	.880	NW	2	3 a.	.754	N	5	6 a.	.921	NNW	4	3 a.	.816	N	6	3 a.	.872	NW	6
,, ,,	10 ,,	.907	NW	2	9 ,,	.845	N	4	Noon	.984	NNE	3	9 ,,	.924	N	6	9 ,,	.926	NW	5
,, ,,	4 p.	.916	N	1	3 p.	.845	N	4	6 p.	29.980	NNE	2	3 p.	.902	NNW	5	3 p.	.906	NW	5
,, ,,	10 ,,	.968	N	1	9 ,,	.871	N	3	Midt.	30.017	N	2	9 ,,	.956	N	4	9 ,,	.966	NW	4

The barometer-readings at the four lighthouses have been corrected and reduced to 32° and to Sea Level or very nearly to Sea Level, according to data supplied by the Imperial Maritime Customs of China. The index-corrections have not been determined by comparison with the standards at the Observatory. The Sicawei observations have been copied from one of the newspapers published in Shanghai.

Already in the early morning hours on the 11th the wind at S. Cape (Formosa) was backing towards NE, from which direction it then continued to blow for three days varying between a light air and a gentle breeze. The barometer reached a maximum on the 11th and fell then slowly till the 14th, when it had fallen about 0.15 inches in three days. At the same time the temperature was rising slowly. On the 12th a fresh NE breeze was encountered in the northern entrance to the Formosa Straits. The barometer began to fall and rain set in in Manila, where a light SW breeze was blowing. At 4 p. on the 13th a strong WSW breeze with close, misty and wet weather was reported from there. The barometer had reached a minimum, 29.75 inches. At the same hour next day a fresh SW breeze was reported. The barometer had then fallen several hundredths of an inch along the southern coast of China, where detached clouds with rain in places and variable winds were observed

On the 15th the barometer rose at all these stations, SW breezes prevailed except is southern Formosa, where the breeze came from NW. By this time Typhoon XIII had made its appearance in southern Japan. It has been investigated by Mr. KNIPPING, who considers, that it did not come from the sea developed but grew in the immediate vicinity of the coast. Now it is evident from the data mentioned above, that it came from the south and that it passed northwards, while still far to the East of Formosa, but it is very likely that it did not develope itself fully till near the coast of Japan. It is possible, that its course was influenced by the progress of Typhoon XII on the mainland, although that Typhoon was then in a very feeble condition.

The weather-maps published at Tokio on the 14th show only a slight general gradient and the barometric changes had been slight. The temperature was rather high all over Japan with rain-clouds or slight rain on the south coast. Elsewhere the weather was mostly clear. Variable winds and generally fair weather were expected.

Nine hours later, at 6 a. on the 15th, a very deep depression was off Kii peninsula with steep gradients and a fall of 0.55 inches at Wakayama, the station nearest the centre and yet about 50 miles away from it. The centre appears to have been in 33° 10′ N, 135° 13′ E. The lowest reading of the barometer reported was 27.87 at 11 h. 30 m. a.

At 2 p. on the 15th, the centre was in 35° 35′ N, 139° 0′ E. It took the central calm 4 minutes to pass across Hamamatsu, from which Mr. KNIPPING concludes, that its diameter was 2 nautical miles. – At 9 p. the centre was in 38° 0′ N, 141° 50′ E.

After the passage of this storm the pressure remained rather low in the west, and the temperature rather high in the whole south, and before the damage done to the telegraph lines could be repaired, a second storm approached Kiushiu.

At 10 a. on the 15th, I wrote in the *China Coast Meteorological Register:* 'The Typhoon appears to have recurved inland in China, to have re-entered the sea north of Shanghai and to be moving towards Japan, but its energy seems to be expended,' and I have no doubt, that the storm then approaching western Japan was identical with Typhoon XII, that had raged in Hongkong on the 11th, and that it regained its energy over the sea.

It must be confessed, that its course across the sea from Shanghai to Nagasaki was remarkably slow, but this may have been caused by the anticyclonic area following in the wake of Typhoon XIII. There seem to be no observations available for the more minute investigation of its passage across the sea. It is to be hoped, that observations from Port Hamilton will in similar cases in future remedy that defect.

At 2 p. on the 16th, the centre was evidently west of Kiushiu and was moving slowly eastward. At 6 a. on the 17th, it appears to have been in 32° 10′ N, 129° 30′ E. Mr. KNIPPING wrote: 'A depression has appeared in the W, with a heavy fall of pressure in Kiushiu, a decided rise on part of the Southern and Eastern coast; readings ranging from 30.04 inches on the Eastern coast to 29.53 at Saga. Easterly winds, strong in the extreme W, prevail with cloudy weather, fog on the NW coast, slight rain in Kiushiu.'

At 2 p. on the 17th, the centre was in 33° 40′ N, 131° 0′ E. Mr. KNIPPING wrote: 'The barometer has fallen at all stations, much in the W; with mostly Easterly winds and cloudy weather, some rain.' At 9 p. the centre was in 34° 20′ N, 133° 30′ E and at 6 a. on the 18th in 35° 30′ N, 138° 0′ E. There fell much rain in central Japan. At 2 p. in the afternoon it had passed into the Pacific.

Both these storms were unusually severe and winds blowing with full typhoon force are stated to have been encountered. The S. S. *City of Tokio* from San Francisco to Yokohama, encountered 1400 miles east of Tokio in 35°. 4 N, 170°. 4 E, on the 27th September a strong southern gale backing through E to N with the barometer down to 29.37 and Mr. KNIPPING states, that if this should prove to have been the same storm, its progress in the Pacific was much less than in Japan, namely 6 or 7 nautical miles per hour, while its rate of progress on the 17th was about 20 miles and on the 18th about 30 miles per hour.

Meantime gentle winds and fine weather had reigned over Southern China. The barometer reached its maximum 29.95 at 10 a. on the 17th in Manila and the same day also at S. Cape. The gentle W breeze, which blew in the latter place the previous day had veered to NE and increased in force during the following days. The weather was fine. SW breezes appear to have continued over Luzon till the morning of the 19th, when a gentle NW breeze and detached clouds were reported from Bolinao. I notified in the morning, that it was possible that a new depression was approaching from the East. Moderate E breezes prevailed along the southern coast of China, fresh NE breezes in the Straits and N breezes in the neighbourhood of Shanghai.

On the morning of the 19th a moderate NE breeze blew at S. Cape and the weather became misty with passing showers of rain. In the evening a fresh NW gale was reported from Bolinao and a strong NE breeze blew at S. Cape. Rain fell in both places and shocks of earthquakes were felt in Luzon. At 10 a. the centre of Typhoon XIV must have been about 16° N, 124½° E and at 10 a. on the 20th in 18½° N, 122½° E. At the latter hour a strong WNW gale with overcast weather was

reported from Bolinao. The weather continued bad at S. Cape with a strong NE breeze, whi increased to a fresh NNE gale during the following night. Strong NE breezes were registered in t northern part of the Formosa Straits. The lowest reading of the barometer reported from Manil 29.71 at 4 p. on the 19th and the 20th.

At 10 a. on the 21st I notified, that the Typhoon had entered the China Sea through the Bash Channel and appeared to be moving towards the Straits of Formosa. It is now seen, that at the ti the centre must have been situated in 21° 7′ N, 121° 16′ E. It appears, that it then proceeded towar NNW passing east of the lighthouse at S. Cape, to which it approached within about ten miles shor after noon. It crossed the plain along the western coast of Formosa and entered the Straits about 7 when it went northwards. It passed east of Takow about 4 p. and was east of Foochow about 3 next morning, after which it went towards NNE.

The following observations were made in the harbours and at the lighthouses. The baromet at S. Cape was a sluggish and unsatisfactory instrument, which has since been replaced by a standa barometer verified by comparison with the instruments at this Observatory. The registers fr Matsou and Keelung were kept on board the French men-of-war *Triomphante* and *Duguay Trou* I have determined and applied corrections to the barometer readings as well as possible from availab data but the result is not satisfactory.

The isobars may have been approximately circular in shape. It appears that a strong gal corresponded to a gradient of 0.033 inches in 15 nautical miles. But at several stations west of th centre in the Straits the N gales continued to blow after the passage of the centre, the wind backin subsequently. The wind formed on an average an angle of 65° with the gradient. It was much le in the advancing semi-circle (about 40°) than in the rear (about 90°) owing to the steadiness of th northerly winds.

From observations made on the S. S. *Thibet* and the S. S. *Telemachus* it is seen that the low clouds came from about the same direction as the wind; but their direction did not hang so long abo North as the surface winds. The former ship, which passed through the Straits on the 21st, encou tered a storm from NNW at midnight. The sea was very high, the rain heavy and continuous and th squalls fierce.

September.	S. Cape.			Takow.			Fisher Island.			Lamocks.			Hongkong.		
	Barometer.	Wind.		Barometer.	Wind.		Barometer.	Wind.		Barometer.	Wind.		Barometer.	Wind.	
		Dir.	Force.		Dir.	Force.		Dir.	Force.		Dir.	Force.		Dir.	Force.
1884.															
21st, 9 a.,	29.10	NNE	10	...	...	...	29.31	N	9	29.56	NW	5	29.762	W	
10 a.,	...	...	...	29.26	N	6	.29	N	9	...	...	...	.762	NW	
11 a.,	...	...	...	...	...	...	.25	N	9	...	...	...	.750	NW	
Noon,	29.09	NW	10	29.17	N	7	.23	N	9	29.56	NW	5	.738	NW	
1 p.,	...	...	...	29.15	N	7	.19	N	9	...	...	...	.715	NW	
2 p.,	...	...	...	29.12	N	7	.13	N	10	...	...	...	.686	NW	
3 p.,	29.15	WSW	10	29.11	N	7	.12	NNW	11	29.53	NW	5	.687	NW	
4 p.,	...	...	...	29.11	N	7	.12	NNW	11	...	...	...	.695	NW	
5 p.,	...	...	...	29.11	N	7	.11	NNW	12	...	...	...	.698	WNW	
6 p.,	29.25	WSW	9	29.13	N	7	.07	NNW	12	29.51	NW	5	.707	WNW	
7 p.,	...	...	...	29.20	N	7	.09	NNW	12	...	...	...	.712	NW	
8 p.,	...	...	...	29.23	NNW	8	.11	NNW	12	...	...	...	.738	NW	
9 p.,	29.39	WSW	10	29.26	NNW	9	.14	NNW	12	29.52	NW	6	.752	NNW	
10 p.,	...	...	...	29.30	NW	10	.15	NNW	12	...	...	...	.764	NNW	
11 p.,	...	...	...	29.33	NW	10	.18	NNW	12	...	...	...	.766	N	
Midt.,	29.50	WSW	9	29.36	W	11	.21	NNW	12	29.54	NW	6	.750	NNW	
22nd, 1 a.,	...	...	...	29.39	W	10	.24	NNW	12	...	...	...	.732	NNW	
2 a.,	...	...	...	29.43	W	9	.28	NNW	10	...	...	...	.727	NNW	
3 a.,	29.51	WSW	8	29.48	W	8	.39	NW	10	29.55	NW	6	.732	NNW	
4 a.,	...	...	...	29.52	WSW	8	.42	NW	8	...	...	...	.745	NW	
5 a.,	...	...	...	29.56	WSW	7	.45	WNW	6	...	...	...	.755	NW	
6 a.,	29.67	WSW	7	29.58	WSW	6	.49	WNW	6	29.57	NW	4	.778	NW	
7 a.,	...	...	...	...	...	...	...	...	...	...	...	...	.787	NW	
8 a.,	...	...	...	...	...	...	...	...	...	...	...	...	.794	NW	
9 a.,	29.70	WSW	5	29.68	NW	4	.56	W	6	29.65	WNW	4	.805	NW	
10 a.,	...	...	...	...	...	...	...	...	...	...	...	...	.817	NNW	
11 a.,	...	...	...	...	...	...	...	...	...	...	...	...	.803	NNW	
Noon,	29.74	WSW	5	29.70	NW	3	.64	SW	4	29.68	WNW	3	.788	NNW	
1 p.,	...	...	...	...	...	...	...	...	...	...	...	...	.781	NNW	
2 p.,	...	...	...	...	...	...	...	...	...	...	...	...	.781	NNW	
3 p.,	29.70	WSW	5	29.71	N	3	.64	SW	4	29.68	WNW	3	.766	NW	
4 p.,	...	...	...	...	...	...	...	...	...	...	...	...	.757	NW	
5 p.,	...	...	...	...	...	...	...	...	...	...	...	...	.770	NW	
6 p.,	29.72	W	4	...	...	...	.66	NNE	3	29.68	KNW	3	.780	NW	

September.	Tamsui.			Keelung.			Ockseu.			Turnabout.			Middle Dog.			Matsou.		
	Barometer.	Wind.		Barometer.	Wind.		Barometer.	Wind.		Barometer.	Wind.		Barometer.	Wind.		Barometer.	Wind.	
		Dir.	Force.		Dir.	Force.		Dir.	Force.		Dir.	Force.		Dir.	Force.		Dir.	Force.
1884.																		
21st, 10 a.m.	29.25	SE	9	29.47	NE	4	29.34	NNE	11	...	NNE	7	...	NE	9	29.67	N	5
11 a.m.	29.23	SE	9	...	...	...	29.31	NNE	12	...	NNE	8	...	NE	9	...	...	...
Noon	29.22	E	9	29.45	NE	4	29.30	NNE	11	29.55	NNE	8	29.68	NE	9	29.63	N	6
1 p.m.	29.19	E	9	...	...	...	29.25	NNE	12	.52	...	...	29.62	...	...	29.61	N	6
2 p.m.	29.20	SE	8	29.38	NE	5	29.19	NNE	12	.41	...	...	29.59	...	...	29.59	N	6
3 p.m.	29.22	S	7	...	...	...	29.18	NNE	12	.42	NNE	10	29.58	NE	10	29.59	N	6
4 p.m.	29.24	S	7	29.33	NE	5	29.12	NNE	12	.37	...	...	29.56	...	...	29.59	N	5
5 p.m.	29.25	S	7	...	...	...	29.11	NNE	12	.33	...	...	29.53	...	...	29.57	N	5
6 p.m.	29.25	SW	6	29.29	NE	5	29.06	NNE	12	.30	NNE	10	29.50	NE	10	29.57	N	6
7 p.m.	29.25	SW	5	...	...	...	29.06	NNE	12	.27	...	...	29.49	...	...	29.56	N	6
8 p.m.	...	...	...	29.26	E	5	29.05	NNE	12	.24	...	...	29.53	...	...	29.56	N	7
9 p.m.	...	SW	...	...	...	...	29.05	NNE	12	.23	NNE	10	29.49	NE	10	29.55	N	7
10 p.m.	...	...	...	29.22	E	5	29.05	NNE	12	.21	...	...	29.49	...	...	29.55	N	7
11 p.m.	...	...	...	...	...	...	29.05	NNE	12	.21	...	...	29.51	...	...	29.55	N	7
Midt.	...	...	...	29.19	E	5	29.02	NNE	12	.22	NNE	11	29.52	NE	11	29.54	N	7
22nd, 1 a.m.	...	...	...	...	...	...	29.09	NNE	12	.18	...	...	29.51	NE	11	29.52	N	7
2 a.m.	...	...	...	29.09	E	6	29.14	NNE	12	.14	...	...	29.41	...	...	29.46	N	7
3 a.m.	...	...	...	...	...	...	29.18	N	12	.12	NE	11	29.40	NE	11	29.46	N	7
4 a.m.	...	...	...	29.06	SSW	5	29.20	N	12	.09	...	...	...	...	...	29.44	N	8
5 a.m.	...	...	...	...	...	...	29.20	N	11	.13	...	...	...	...	...	29.42	N	8
6 a.m.	...	...	...	29.11	S	3	29.25	N	10	.14	NE	10	29.34	N	10	29.40	N	7
7 a.m.	29.25	SE	3	...	...	...	29.30	N	10	.18	...	...	29.33	...	...	29.38	N	7
8 a.m.	29.30	SE	4	29.17	S	3	29.30	NW	10	.19	...	...	...	...	...	29.36	N	6
9 a.m.	29.35	SE	7	...	...	...	29.42	W	7	.22	NNW	9	29.36	NNW	10	29.38	N	6
10 a.m.	29.43	S	9	29.23	S	3	...	...	...	.25	...	...	...	...	...	29.40	N	5
11 a.m.	29.45	SSW	10	...	...	...	...	...	...	.31	...	...	...	...	...	29.40	NNW	5
Noon	29.47	SSW	10	29.31	S	3	29.50	W	6	.36	W	9	29.40	NNW	8	29.40	NNW	5
1 p.m.	29.50	SW	9	...	...	...	...	...	...	.38	...	...	...	...	...	29.42	NW	5
2 p.m.	29.53	SW	7	29.37	S	3	...	...	...	.41	...	...	...	...	...	29.43	NW	4
3 p.m.	29.55	SW	7	...	...	...	29.55	WSW	6	.45	WSW	5	29.47	WNW	6	29.46	NNW	4
4 p.m.	29.56	SW	7	29.42	S	4	...	...	...	.48	...	...	...	...	...	29.52	NW	4
5 p.m.	29.60	SW	7	...	...	...	...	...	...	.51	...	...	...	...	...	29.55	NW	3
6 p.m.	29.62	SW	5	29.47	S	4	29.62	WSW	6	.53	WSW	4	29.58	WSW	6	29.59	W	3

Meantime fresh SW breezes blew in the China Sea, where the weather was fine. At 10 a. on the 22nd, the center appears to have been in 26° 23′ N, 121° 3′ E. and to have been moving towards NNE along the Coast. I wrote in the *China Coast Meteorological Register*: 'The typhoon has entered the Straits of Formosa, and is moving northwards. It appears to be very dangerous, and will probably now recurve towards Japan passing North of Formosa.'

The following observations were made in Ningpo, where it began to rain early in the morning on the 21st. The rain ceased in the evening on the 23rd. The barometer is uncorrected:—

Date.	Hour.	Bar.	Tem.	Wind.		Date.	Hour.	Bar.	Tem.	Wind.		Date.	Hour.	Bar.	Tem.	Wind.	
				Dir.	For.					Dir.	For.					Dir.	For.
Sep. 22	4a	29.86	72	E	4	Sep. 23	4a	29.68	74	NE	8	Sep. 24	4a	29.78	70	NW	3
	8a	.90	72	NE	3		8a	.70	75	NE	6		8a	.82	70	NW	3
	Noon	.86	72	NE	4		Noon	.72	75	NW	3		Noon	.84	73	NW	4
	4p	.80	71	NE	5		4p	.72	74	NW	4		4p	.84	72	NW	3
	8p	.78	72	NE	7		8p	.78	74	NW	7		8p	.92	72	NW	1
	Midt.	.78	73	NE	8		Midt.	.78	70	NW	5		Midt.	.90	70	NW	1

The following observations made at Sicawei have been copied from one of the newspapers published in Shanghai:—

Date.	Hour.	Bar.	Tem.	Wind.		Date.	Hour.	Bar.	Tem.	Wind.		Date.	Hour.	Bar.	Tem.	Wind.	
				Dir.	For.					Dir.	For.					Dir.	For.
Sep. 22	4a	29.913	71	NE	3	Sep. 23	4a	29.775	69	NE	5	Sep. 24	4a	29.737	71	NW	4
	10a	.951	73	NE	5		10a	.777	68	NNE	6		10a	.816	74	NNW	2
	4p	.892	69	NE	5		4p	.677	71	NNW	7		4p	.812	73	W	4
	10p	.878	67	NE	6		10p	.719	70	NNW	4		10p	.893	67	WNW	1

The following observations were made at the Lighthouses. They have been reduced as explained above:—

Date 1884.		Hour.	Steep Island.			North Saddle.			Gutzlaff.			Shaweishan.		
			Barometer.	Wind. Dir.	Force.	Barometer.	Wind. Dir.	Force.	Barometer.	Wind. Dir.	Force.	Barometer.	Wind. Dir.	Force.
Sept.	22	3a	29.871	NE	5	29.917	ENE	7	...	NE	6	29.850	NE	5
,,	,,	6a	.891	NE	6	.873	ENE	8	29.954	NE	6	.881	NE	5
,,	,,	9a	.891	NE	6	.883	NE	9	...	NE	6	.950	NE	6
,,	,,	Noon	.864	NE	6	.867	ENE	10	.941	NE	7	.863	NE	6
,,	,,	3p	.861	NE	6	.803	ENE	10	.913	NE	7	.842	NE	6
,,	,,	6p	.851	NE	7	.754	NE	11	.857	NE	7	.877	NE	7
,,	,,	9p	.801	NE	7	.735	NE	12	.873	NE	7	.857	NE	7
,,	,,	Midt.	.753	NE	7	.667	NE	12	.801	NE	7	.762	NE	8
,,	23	3a	.602	NE	6	.648	NE	12	.746	NE	7	.738	ENE	9
,,	,,	6a	.595	NE	5	.594	NE	12	.713	NE	8	.710	ENE	9
,,	,,	9a	.653	E	7	.635	ENE	9	.711	NE	8	.750	ENE	9
,,	,,	Noon	.614	E	6	.667	ESE	3	.692	NE	6	.657	ENE	8
,,	,,	3p	.525	SE	6	.595	SE	3	.661	NE	5	.640	ENE	8
,,	,,	6p	.559	NNW	6	.579	SE	3	.674	NE	4	.639	ENE	7
,,	,,	9p	.633	NNW	6	.638	NE	5	.724	NE	3	.667	NE	5
,,	,,	Midt.	.655	NNW	6	.667	N	5	.724	NE	2	.753	NE	5
,,	24	3a	.674	WNW	6	.622	WNW	5	...	N	2	.635	NE	6
,,	,,	6a	.675	WNW	6	.695	NNW	6	.766	N	4	.659	NNW	4
,,	,,	9a	.743	WNW	5	.740	NW	7	...	N	4	.679	NNW	4
,,	,,	Noon	.785	WNW	5	.743	NW	7	.835	N	4	.746	NNW	4
,,	,,	3p	.785	WNW	5	.757	NW	6	...	NNW	4	.772	NNW	4
,,	,,	6p	.818	WNW	5	.797	NW	5	.880	NNW	4	...	NNE	4
,,	,,	9p	.871	WNW	5	.841	NW	5	...	NNW	4	...	WNW	4
,,	,,	Midt.	.872	WNW	5	.859	NW	5	.933	NNW	4	...	WNW	4

At 10 a. on the 23rd, the centre was in 29° 38′ N, 122° 15′ E moving towards N by E. Between 3 p. and 4 p. when NW of Steep Island, it appears to have turned towards NE. Overcast weather with drizzling rain set in at the lighthouses in the neighbourhood as early as the 19th. Passing showers were registered next day, and constant heavy rain fell at Steep Island on the 22nd. The weather cleared on the 25th.

The isobars on the 23rd may have been approximately circular in shape. It appears that a strong breeze corresponded to a gradient of 0.024 inches in 15 miles. The wind formed on an average an angle of 74° with the gradient. It is, for want of observations in the right hand semi-circle, not possible to determine with accuracy the angle in different quadrants. But it may have been about 59° in the advancing semi-circle and 89° in the rear. The disturbance was much shallower than on the 21st. The lowest barometer on the 23rd being about 29.50 instead of about 29.00, to which the barometer probably fell on the 21st. The incurvature of the wind appears also to have decreased as the Typhoon passed northwards.

At 10 a. on the 24th the centre appears to have been situated about 32° N, 126° E. At the NE Shantung Promontory a fresh E breeze on the 23rd increased to a strong breeze on the 24th. During the following night it backed to N, and blew a strong NNE breeze at 3 p. on the 25th, after which it decreased in strength. Passing showers were registered on that day.

At Chefoo a gentle NE breeze on the 23rd backed to N on the 25th and to NW on the 26th. The weather was fine, but at Taku it rained on the 25th.

At Newchwang the wind was NNE between the 24th and the 27th. It blew a strong NNE breeze at 7 a. on the 25th.

At 10 a. on the 25th the centre appears to have been in 38° N, 132° E and at 10 p. in 40½° N, 126½° E. The barometer at Wladivostock fell to 29.80 at 4 p. The weather was overcast and wet with a gentle N breeze. In Japan cloudy and rainy weather prevailed. At 10 a. on the 26th the centre was about 44° N, 139° E.

Over southern China the sky was blue, the barometer rising and light W and NW breezes were blowing on the 23rd and the 24th. In Manila the barometer reached its maximum 29.97 at 10 a. on the 24th. A light air from SW was reported but at 10 a. next morning the wind had veered to NW and blew a gentle breeze at Bolinao. Fine weather was reported from Luzon but it rained in Formosa. Light NE breezes with overcast skies were observed in the Straits. At 10 a. on the 26th the barometer was still falling over Luzon. A moderate N breeze is reported from Bolinao. Heavy rain was reported

Manila, where the barometer as far as can be gathered from the telegraphic reports reached its imum 29.80 at 4 p. At sea west of Luzon a hard gale and a heavy sea were encountered. In the th of China the weather was fine and the winds light. Detached clouds were registered in southern na and it rained in Formosa. At 10 a. on the 27th light ESE and SE breezes were reported from on, where the barometer had risen. Moderate E or NE breezes blew along the southern coast of na, where the sky was partly overcast. On the 28th fresh or strong NE breezes prevailed and in China sea NE gales and a rough sea were encountered as also on the following day. From these it may safely be concluded, that a depression, which passed south of Manila on the evening of the h, entered the China Sea, but whether it was accompanied by winds blowing with Typhoon force how long it lasted cannot be ascertained from the meagre data available. Most likely it was of short duration as it entered the sea is such a low latitude.

The Barograph and the Standard Barometer at the Observatory are placed 110 feet above Mean Level. The bulbs of the Thermograph Thermometers are 111 feet above Mean Sea Level and 6 above the ground. They are exposed in an unpainted and double-louvered zinc screen fixed to north wall of the main building in a shaded position. The Solar Radiation Maximum Thermome- is 109 feet above Mean Sea Level and 4 feet above the ground, and the Terrestrial Radiation imum Thermometer is about one inch above the ground. The self-recording Rain-gauge is placed feet above Mean Sea Level, and the rim, which is $11\frac{1}{4}$ inches in diameter, is 21 inches above the und. The cups of the Anemograph are 45 feet above the ground, and 150 feet above Mean Sea el.

At Victoria Peak the Instruments, except the Radiation Thermometers, are placed in the Look- The Barometer is 1821 feet above Sea Level. The bulbs of the Thermometers are about 4 feet ve the floor, except the Maximum Thermometer, which is a few inches higher. The Radiation rmometers are placed at the same height above the ground as at the Observatory. At Cape guilar the Thermometers are placed about 170 feet above Sea Level (according to the *Government zette*) in a wooden screen 2 feet above the ground, except the Maximum Thermometer, which is a inches higher.

Table I exhibits the hourly readings of the Barometer reduced to 32° .0 Fahrenheit, but not to Level, as measured (at two minutes to the hour named) from the Barograms. The Mean Height he Barometer was 29.685, the Highest was 29.912 at 9 a. and 10 a. on the 28th, and the Lowest 28.876 at 2 a. on the 11th. The Barometric Tide amounted to 0.072.

Table II exhibits the hourly readings of the Temperature (Dry Bulb Thermometer) as measured m the Thermograms (at two minutes past the hour named), and also the Extreme Temperatures ing the day. The Mean Temperature was 81.2, the Highest was 91.5 at about 1 p. on the 6th the Lowest was 74.6 at 6a. on the 23rd.

Table III exhibits the hourly readings of the Temperature of Evaporation (Damp Bulb Thermo- er) as measured from the Thermograms (at two minutes past the hour named) and also the Solar diation Maximum (Black Bulb) and Terrestrial Radiation Minimum Temperatures.

Table IV exhibits the Mean Relative Humidity in percentage of saturation (the humidity of air rated with moisture being 100) and Mean Tension of Aqueous Vapour present in the air expressed nches of mercury, for every hour in the day and for every day in the month. The Mean Tension, ch exhibits a small daily variation, was 0.811. The Mean Relative Humidity, which exhibits a t daily variation, was 76.

Table V exhibits the Duration of Sun-shine as registered by aid of the Sun-shine Recorder from an hour before to half an hour after the hour named. The Sun shone 238.1 hours during the nth.

Table VI exhibits the amount of Rain registered from half an hour before to half an hour after hour named. The Total Rain-fall during the month was 12.370 inches. It rained during 49 rs. The greatest Hourly Rain-fall was 1.190 at 7 p. on the 10th.

Table VII exhibits, for every hour in the day, the Velocity of the Wind and its Direction in mbers (8=E, 16=S, 24=W, 32=N) as measured from the Anemograms. The Velocity is the mber of miles traversed by the Wind, from half an hour before to half an hour after the hour named. Direction is read off at the hour, except when the Wind is very light and changeable, when the rage Direction during the hour is estimated, taking into account the Velocity from different quarters. Direction is not noted when the Velocity is below 1.5 miles an hour.

The Mean Velocity was 13.2 miles an hour. It was greatest during the middle of the day. greatest Velocity 89 miles occurred at midnight on the 10th.

The Total Distance travelled by, as well as the Duration and average Velocity of Winds different quarters were as follows:—

Direction.	*Total Distance.* Miles.	*Duration.* Hours.	*Velocity.* Miles per hour.
N	1729	100	17.3
NE	893	52	17.2
E	3621	213	17.0
SE	730	59	12.4
S	1133	87	13.0
SW	78	18	4.3
W	535	70	7.6
NW	705	61	11.6
Calm	47	60	0.8

Table VIII exhibits, for every hour in the day, the Velocity of the Wind reduced to 4 and a 2 Directions, as well as the Mean Direction of the Wind, which exhibits a great daily variation.

Table IX exhibits the Direction (to two points) and Force of the Wind (0-12) at Victoria P The Average Force of the Wind was 3.5 corresponding to 20 miles an hour. The Sea Disturb (0-9) exhibited in the same table has been derived from observations made at Cape d'Aguilar.

Table X exhibits the Amount (0-10), Name and Direction, whence coming, of the Clouds. W the names of Upper and Lower Clouds are given, but only one Direction, this refers to the L Clouds. On an average 43 per cent of the sky was clouded. There were more Clouds during th than during the night.

Table XI and XII exhibit the readings of the Barometer reduced to 32.0 Fahrenheit but n Sea Level, at Victoria Peak, and the Thermometers at Victoria Peak and at Cape d'Aguilar.

The Mean Height of the Barometer at the Peak was 27.993. The Mean Temperature was at the Peak and 80.4 at Cape d'Aguilar, the Highest was 82.5 on the 8th at the Peak and 91.0 o 20th at Cape d'Aguilar, and the Lowest was 67.0 on the 24th at the Peak, and 73.6 on the 8 Cape d'Aguilar.

The Mean Temperature in Hongkong decreased one degree Fahrenheit for every 252 feet ascen

Table XIII exhibits the Relative Humidity as determined from observations of the Dry and W Thermometers. The Mean Relative Humidity at the Observatory was 76, at Cape d'Aguila and at Victoria Peak 87. The Least Relative Humidity registered was 44 at 4 p. on the 20th a Observatory, 52 at 4 p. on the 22nd at Cape d'Aguilar, and 64 at 10 a. on the 22nd at Victoria P

Table XIV exhibits the Tension of Aqueous Vapour at the Observatory and at the Peak. Mean Tension was 0.811 at the Observatory, and 0.741 at the Peak. The Greatest Te registered was 0.967 at 4 p. on the 14th at the Observatory, and 0.920 at 4 p. on the 7th at the P The Least Tension was 0.518 at 10 a. on the 23rd at the Observatory, and 0.538 at 10 a. o 22nd at the Peak.

Table XV exhibits the amount of Rain measured at 10 a. on the following day, and the da of Precipitation at the Observatory. The greatest amount fell on the 10th when it rained 9.480 Observatory, and 6.50 at the Peak. Unfortunately, the rain was not measured on that day at Cutters' Island.

Lightning was seen on the evening of the 1st and thunder heard, during the day on the 2nd and 4th with lightning at night on those days.

Thunder was heard during the day on the 7th and lightning seen the same evening.

On the 8th, at 3 a. a thunderstorm passed over, and the same evening lightning was again obs

Lightning was noticed in the evening on the 9th, the 12th, the 13th, the 14th, the 15th, the the 17th, and the 18th.

Lightning was seen and thunder heard during the evening of the 19th.

Lightning was noted in the evening on the 20th.

During the early hours of the 27th a slight thundertorm passed.

Lighting was seen in the evening of the 29th, and 30th.

Dew was noted in the evenings on the 1st, 2nd, 4th, 5th, 6th, 13th, and 14th.

Visibility was noticed on the 5th, and 7th.

Rainbows were seen on the 9th, 13th, and 14th.

A Lunar halo was seen on the 30th.

TABLE I.

BAROMETRIC PRESSURE FOR THE MONTH OF SEPTEMBER, 1884.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means.
Sept. 1, ...	29.720	29.715	29.704	29.693	29.694	29.709	29.721	29.742	29.757	29.752	29.751	29.736	29.703	29.689	29.662	29.657	29.665	29.672	29.687	29.710	29.724	29.742	29.725	29.718	29.710
„ 2, ...	.709	.703	.702	.695	.708	.717	.729	.741	.752	.758	.763	.752	.739	.721	.703	.691	.691	.696	.712	.738	.749	.768	.768	.759	.728
„ 3, ...	.747	.748	.739	.732	.741	.746	.756	.776	.791	.788	.781	.767	.755	.728	.716	.719	.719	.730	.758	.772	.792	.802	.803	.793	.757
„ 4, ...	.779	.760	.740	.743	.746	.759	.778	.794	.799	.808	.794	.776	.764	.744	.736	.724	.726	.741	.749	.768	.780	.794	.796	.784	.766
„ 5, .	.773	.764	.752	.756	.758	.775	.781	.789	.794	.790	.775	.767	.744	.721	.710	.705	.701	.700	.708	.732	.748	.760	.762	.759	.751
„ 6, ...	.750	.748	.742	.742	.741	.742	.745	.748	.749	.746	.740	.733	.717	.703	.681	.670	.669	.674	.689	.704	.718	.729	.742	.736	.723
„ 7, ...	.722	.712	.706	.702	.702	.713	.718	.719	.729	.728 †	.716 †	.701	.683	.659	.639	.637	.631	.647	.665	.692	.706	.712	.703 †	.682	.692
„ 8, ...	.666	.662	.661	.656	.647	.657	.667	.673	.674	.668 *	.654 *	.636	.614	.588	.570	.558 *	.554 *	.550	.547	.553	.557	.557	.544	.525	.610
„ 9, ...	.507	.502	.487	.487	.490	.500	.504	.505	.506	.504	.501	.494	.476	.460	.448	.439	.434	.430	.439	.447	.461	.467	.449	29.439	.474
„ 10, ...	29.414	29.389	29.381	.379	.373	.383	.376	.370	.368	.351	.323	.298	.262	.238	.214	.200	.194	.156	.134	.135	.124	.069	.002	28.922	.252
„ 11, ...	28.884	28.876	28.910	.015	.082	.129	.174	.232	.283	.330	.350	.368	.368	.376	.384	.409	.427	.455	.464	.496	.526	.530	.531	29.533	.297
„ 12, ...	29.534	29.518	29.516	.520	.522	.540	.556	.580	.597	.602	.607	.596	.578	.565	.560	.566	.572	.582	.594	.619	.625	.627	.626	.614	.576
„ 13, ...	.600	.591	.576	.581	.577	.590	.596	.612	.617	.619	.605	.584	.564	.546	.535	.538	.538	.546	.553	.572	.586	.603	.596	.583	.579
„ 14, ...	.575	.563	.559	.554	.561	.570	.570	.586	.584	.592	.581	.558	.537	.522	.509	.507	.504	.511	.534	.545	.566	.573	.581	.576	.555
„ 15, ...	.561	.557	.555	.551	.551	.566	.593	.609	.619	.627	.626	.611	.591	.580	.576	.581	.584	.595	.614	.632	.650	.668	.664	.664	.601
„ 16, ...	.660	.660	.659	.659	.664	.679	.693	.706	.727	.732	.740	.724	.698	.688	.679	.675	.684	.689	.703	.737	.764	.773	.776	.777	.706
„ 17, ...	.768	.752	.747	.749	.755	.762	.786	.802	.814	.823	.808	.794	.775	.754	.742	.741	.743	.751	.764	.775	.786	.805	.795	.784	.774
„ 18, ...	.767	.754	.750	.743	.745	.752	.764	.784	.794	.803	.794	.779	.763	.745	.734	.735	.735	.746	.759	.780	.799	.805	.803	.797	.768
„ 19, ...	.778	.750	.739	.741	.753	.765	.784	.798	.804	.801	.797	.784	.756	.738	.729	.725	.723	.733	.751	.755	.774	.793	.801	.783	.765
„ 20, ...	.765	.752	.737	.731	.736	.748	.765	.765	.763	.756	.736	.713	.687	.660	.643	.642	.647	.658	.664	.680	.684	.684	.678	.670	.707
„ 21, ...	.650	.641	.631	.620	.622	.632	.639	.650	.650	.650	.638	.626	.603	.574	.575	.583	.586	.595	.600	.626	.640	.652	.655	.638	.624
„ 22, ...	.620	.615	.620	.633	.643	.666	.675	.682	.693	.705	.691	.676	.669	.669	.654	.645	.658	.668	.675	.700	.722	.739	.738	.732	.674
„ 23, ...	.729	.727	.723	.722	.732	.748	.770	.786	.783	.782	.781	.766	.744	.727	.716	.713	.716	.737	.755	.780	.801	.809	.811	.807	.757
„ 24, ...	.792	.790	.787	.787	.781	.781	.786	.802	.801	.806	.801	.783	.760	.753	.743	.744	.747	.757	.762	.775	.784	.791	.789	.789	.779
„ 25, ...	.777	.768	.757	.758	.769	.787	.787	.804	.804	.802	.790 †	.769	.756 †	.729 †	.732 †	.734	.742	.745	.754	.761	.781	.788	.786	.778	.769
„ 26, ...	.769	.764	.758	.767	.781	.790	.808	.823	.829	.828	.820	.811	.791	.768	.762	.759	.764	.774	.777	.794	.801	.807	.805	.805	.790
„ 27, ...	.801	.801	.783	.787	.793	.821	.833	.837	.870	.859	.898	.871	.855	.826	.815	.818	.822	.831	.840	.862	.870	.871	.872	.870	.836
„ 28, ...	.860	.847	.835	.841	.850	.865	.887	.901	.912	.912	.906	.893	.872	.853	.839	.835	.833	.850	.856	.872	.882	.885	.868	.864	.867
„ 29, ...	.850	.839	.828	.824	.839	.856	.872	.893	.903	.910	.892	.877	.852	.833	.811	.810	.810	.820	.831	.855	.864	.861	.857	.846	.851
„ 30, ...	.828	.821	.809	.813	.823	.829	.837	.851	.856	.865	.853	.842	.814	.794	.779	.780	.786	.791	.802	.816	.828	.833	.832	.822	.821
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hourly Means, ...	29.678	29.670	29.663	29.666	29.673	29.686	29.698	29.718	29.721	29.723	29.716	29.703	29.682	29.665	29.653	29.651	29.653	29.661	29.671	29.689	29.703	29.710	29.705	29.695	29.685

* Interpolated. † Approximate Reading.

TABLE II.

TEMPERATURE FOR THE MONTH OF SEPTEMBER, 1884.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means	Max.	Min.
Sept. 1,.....	80.1	80.0	78.9	78.6	79.1	79.1	79.8	80.6	81.6	82.5	83.4	83.0	85.0	86.1	86.9	87.2	85.0	82.9	82.2	82.0	81.7	81.2	80.8	80.8	82.0	87.7	78.4
" 2,.....	80.7	80.6	80.2	80.2	80.2	80.0	80.7	82.0	83.9	83.6	84.8	84.0	84.3	84.3	82.0	87.6	86.2	83.3	82.2	81.5	80.8	80.4	80.4	80.1	82.2	87 9	80.0
" 3,.....	79.4	78.2	77.6	77.6	77.8	77.9	79.0	81.4	81.9	83.1	86.2	85.1	87.0	86.8	86.1	87.5	86.1	83.5	82.4	81.7	81.1	80.9	80.6	80.0	82.0	88.1	77.3
" 4,.....	79.3	79.1	78.7	78.7	78.6	78.5	80.1	81.6	82.8	82.6	81.7	83.9	85.0	87.2	87.2	86.3	85.5	83.1	82.0	81.1	80.3	79.9	79.7	79.1	81.7	88.1	78.4
" 5,.....	78.7	78.3	78.2	78.2	78.3	78.0	79.2	81.2	83.3	84.3	85.1	86.4	88.8	87.8	88.1	88.6	85.9	84.2	82.3	81.8	81.2	80.6	80.2	79.2	82.4	89.2	78.0
" 6,.....	78.7	78.5	78.8	77.9	77.8	77.6	79.1	82.1	82.9	84.5	85.1	85.3	86.5	88.3	90.5	91.2	88.5	85.1	83.1	82.3	81.9	81.2	80.7	79.9	82.8	91.5	77.6
" 7,.....	79.3	79.6	79.1	79.0	79.0	79.1	80.2	82.1	83.9	84.3	85.0	86.6	88.7	89.1	89.1	88.7	87.1	86.2	83.3	82.7	82.3	82.1	81.8	81.6	83.3	89.4	78.9
" 8,.....	81.3	79.2	75.8	76.9	77.1	77.6	79.2	81.2	82.1	84.5	84.4	86.2	86.2	86.1	89.0	90.7	89.8	88.0	87.0	85.3	84.0	84.4	86.4	85.8	83.7	91.0	75.7
" 9,.....	85.2	84.9	84.2	83.4	82.9	82.3	82.7	83.7	84.3	85.8	86.7	87.2	87.4	87.3	87.7	87.4	86.4	86.1	84.8	84.5	85.2	82.4	82.1	82.0	84.9	88.0	81.9
" 10,.....	81.8	82.0	81.7	81.4	81.4	79.3	78.7	79.8	81.0	81.8	80.2	77.9	76.9	76.3	75.5	75.2	76.2	77.1	77.2	76.5	77.9	78.8	78.3	78.1	78.8	82.3	74.8
" 11,.....	76.9	77.0	77.1	77.6	77.4	77.7	77.2	76.6	76.4	77.0	77.8	77.0	78.7	78.1	79.0	78.6	78.2	77.8	78.5	78.3	78.1	78.8	78.5	78.8	77.8	79.3	76.1
" 12,.....	78.3	77.1	77.3	77.1	77.7	78.2	78.7	78.0	77.2	77.1	79.5	79.5	80.9	80.8	81.9	81.6	80.9	80.0	79.0	78.7	78.7	78.5	78.8	79.0	78.9	81.9	76.2
" 13,.....	79.4	79.1	79.1	78.5	78.6	79.2	79.6	80.6	81.8	82.2	81.0	83.1	84.8	84.0	86.4	84.8	84.4	82.1	80.4	79.7	79.4	79.4	79.0	78.4	81.0	88.1	78.1
" 14,.....	77.8	77.7	77.3	77.2	76.9	76.8	77.7	79.3	81.0	83.0	83.3	81.8	84.1	87.0	87.2	86.4	85.1	83.0	81.9	81.3	80.9	80.4	80.4	80.0	81.1	88.4	76.8
" 15,.....	80.0	79.6	79.6	78.3	78.1	78.7	79.6	80.8	80.9	81.7	82.2	83.0	83.9	84.9	83.5	87.1	84.1	83.3	81.8	80.8	80.7	80.1	79.9	79.4	81.4	87.4	78.0
" 16,.....	79.2	79.0	79.0	78.7	78.7	78.6	79.2	81.1	82.3	83.6	84.3	85.5	87.2	87.2	87.3	86.2	86.1	83.2	81.6	81.2	80.8	80.4	80.1	80.0	82.1	87.7	78.6
" 17,.....	79.7	78.6	79.1	78.9	78.8	78.7	79.7	81.4	82.5	83.8	84.5	85.9	86.7	87.6	87.9	87.4	85.9	83.2	82.1	81.6	81.2	81.1	81.0	80.9	82.4	88.2	78.3
" 18,.....	80.4	79.8	79.7	79.7	79.8	79.7	80.2	81.1	82.2	82.7	83.8	84.0	84.9	85.0	84.2	84.0	84.1	82.0	81.4	81.0	80.9	80.6	80.3	80.3	81.7	85.9	79.4
" 19,.....	80.0	79.9	79.4	79.0	78.9	79.0	80.2	81.7	83.0	84.0	85.0	86.2	87.2	87.6	88.8	87.0	85.0	82.4	81.6	81.1	80.7	80.3	80.0	79.6	82.4	88.8	79.0
" 20,.....	79.0	78.9	78.6	78.5	78.2	78.1	79.0	81.2	83.3	84.1	85.3	86.6	87.5	88.0	88.0	87.8	87.1	85.1	83.7	81.9	82.5	83.1	82.2	81.8	82.9	88.2	78.1
" 21,.....	80.9	79.9	79.6	79.0	79.1	78.3	79.1	80.1	81.0	81.0	82.0	83.0	83.2	83.3	84.0	85.3	84.3	82.5	82.3	82.0	81.8	81.3	81.7	81.0	81.5	85.4	78.0
" 22,.....	81.0	80.2	79.3	78.0	77.0	76.5	76.8	78.9	80.0	80.3	81.7	82.9	83.8	84.1	83.9	83.3	82.9	81.4	80.3	79.4	80.0	79.9	78.9	78.0	80.4	84.8	76.2
" 23,.....	77.0	76.6	75.9	75.3	75.1	74.6	74.9	76.3	77.3	78.4	80.2	81.3	81.6	83.6	83.4	82.9	81.9	79.7	78.7	78.7	78.3	77.9	77.6	76.3	78.5	84.8	74.6
" 24,.....	77.1	76.3	76.0	75.2	74.9	74.9	75.8	77.1	78.0	79.0	80.3	81.1	85.2	83.6	83.1	80.3	80.2	78.6	78.2	78.0	77.1	77.1	76.6	76.9	78.4	85.3	74.7
" 25,.....	76.7	76.6	76.5	76.3	76.0	75.3	75.8	77.5	79.1	81.1	82.9	82.3	85.1	83.8	85.2	84.0	83.4	80.5	79.5	79.2	78.7	77.8	77.0	76.3	79.4	86.0	75.0
" 26,.....	76.1	76.1	76.1	75.8	75.7	76.2	76.9	78.6	79.5	82.4	83.3	84.9	85.5	85.6	85.9	85.4	83.6	81.1	80.4	80.1	79.8	79.5	79.3	78.5	80.3	86.2	75.6
" 27,.....	78.8	77.8	78.5	78.0	78.1	78.3	79.2	79.8	79.9	80.6	77.9	75.2	79.4	80.2	80.9	80.7	80.7	79.1	79.1	79.0	79.0	79.1	79.2	79.2	79.1	92.1	74.9
" 28,.....	79.1	79.1	79.0	79.0	78.9	77.8	78.2	79.3	80.3	81.2	82.2	83.2	83.9	84.1	84.7	83.2	82.6	80.3	79.8	79.3	79.3	79.1	79.0	80.5	81.9	77.4
" 29,.....	78.8	78.7	78.8	78.7	78.3	78.3	78.7	79.4	80.8	81.2	83.0	83.1	84.2	85.0	85.6	84.6	82.9	80.7	79.8	79.3	79.1	79.1	78.9	78.4	80 6	85.7	78.0
" 30,.....	78.2	78.1	78.3	78.3	78.4	78.0	78.8	80.0	81.1	82.5	82.8	84.1	84.8	84.3	84.6	83.4	81.8	80.5	80.0	79.8	79.7	79.4	79.5	79.3	80.7	85.0	78.0
.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hourly Means, ...	79.3	78.9	78.6	78.3	78.2	78.1	78.8	80.1	81.2	82.1	82.9	83.3	84.6	84.9	85.3	85.1	84.1	82.2	81.2	80.7	80.4	80.2	80.0	79.6	81.2	86.6	77.4

TABLE III.

TEMPERTURE OF EVAPORATION AND RADIATION, FOR THE MONTH OF SEPTEMBER, 1884.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means.	Sun.	Rad.
Sept. 1	77.1	77.5	74.8	75.5	76.7	76.7	77.5	76.8	76.9	77.4	77.9	77.0	78.1	77.6	78.4	77.7	77.8	77.1	77.1	76.7	77.6	77.7	77.9	77.8	77.2	116.1	73.8
„ 2	77.8	77.3	77.3	76.9	76.8	76.3	76.6	77.0	78.3	77.1	77.9	77.6	78.8	75.4	74.4	78.1	77.9	77.6	77.9	78.5	77.7	77.7	77.7	77.9	77.3	148.2	75.5
„ 3	75.3	74.3	74.1	73.7	75.0	74.9	75.9	77.0	77.9	76.0	70.9	78.8	79.1	78.7	77.9	78.6	79.4	78.1	77.8	77.5	77.0	77.1	77.2	76.8	76.9	147.6	73.2
„ 4	76.6	76.8	76.7	76.1	76.7	76.4	77.3	77.6	78.1	76.7	76.7	76.3	77.0	78.1	79.4	78.8	79.0	77.9	77.9	77.6	77.0	76.6	76.4	76.7	77.3	149.8	74.4
„ 5	76.1	76.3	76.3	75.9	76.1	76.2	76.5	78.1	78.4	77.9	77.7	79.7	80.4	80.3	79.7	80.5	79.6	78.8	78.4	77.8	77.5	77.6	76.9	76.7	77.9	149.8	73.0
„ 6	75.9	76.2	76.2	75.8	75.7	75.7	76.6	77.1	77.6	76.3	76.8	78.5	78.0	79.1	*80.9	81.0	80.1	78.7	76.9	76.8	76.8	77.5	77.7	76.9	77.4	143.6	73.1
„ 7	76.5	77.1	76.8	76.4	76.2	76.8	77.1	77.6	78.0	76.2	77.2	79.0	80.7	80.6	80.7	80.7	79.9	79.9	79.2	79.1	78.9	78.6	78.5	77.9	78.3	144.6	73.1
„ 8	78.2	76.4	74.5	75.4	75.2	76.0	76.9	77.6	77.1	78.3	78.1	79.7	80.3	80.3	81.4	81.6	80.3	77.9	76.7	77.4	77.4	76.0	74.7	74.8	77.6	145.9	74.0
„ 9	74.6	74.0	74.3	75.6	74.6	74.4	*74.1	*74.3	*74.1	74.9	75.6	75.8	75.4	75.9	76.4	76.0	75.4	75.0	75.7	75.6	75.3	75.6	75.6	75.5	75.2	152.2	75.4
„ 10	75.4	74.7	74.6	73.8	73.4	73.0	72.4	72.4	72.7	72.7	72.8	72.8	72.5	72.8	73.2	73.6	74.0	74.4	74.2	74.8	75.5	75.4	75.9	75.7	73.9	119.3	72.5
„ 11	75.7	76.0	75.7	75.7	75.3	75.2	75.1	74.8	75.0	75.0	75.0	75.1	75.7	75.2	75.8	75.7	75.7	75.2	75.0	75.7	75.5	75.0	75.0	75.3	110.3	74.7
„ 12	74.7	75.7	75.3	75.6	75.6	75.6	75.9	75.7	75.3	75.4	76.7	76.2	76.9	76.9	77.8	77.7	77.3	77.0	76.9	76.9	77.0	77.1	77.2	77.2	76.4	117.5	74.1
„ 13	77.2	76.7	77.4	75.8	76.3	77.1	77.1	77.9	78.4	78.1	78.9	79.4	80.5	77.9	80.2	79.3	79.4	78.3	77.6	77.7	77.0	77.9	77.6	77.0	77.9	147.2	75.7
„ 14	76.0	75.7	76.0	75.9	75.9	75.8	76.4	77.2	78.0	77.1	79.3	76.9	*78.3	80.8	81.2	80.6	79.2	78.1	78.1	78.8	78.8	78.0	78.3	77.9	77.8	148.3	72.6
„ 15	78.2	77.8	77.8	76.1	76.2	75.3	77.9	77.7	78.0	78.0	78.3	78.3	*78.5	78.7	77.7	78.9	77.9	78.4	78.8	78.3	78.5	78.1	78.0	77.9	77.9	148.2	74.4
„ 16	77.7	77.6	77.2	77.3	77.5	76.3	77.1	77.9	78.6	79.4	79.7	80.1	80.8	80.9	80.5	80.1	80.0	78.9	78.6	78.6	78.5	78.5	78.2	78.2	78.7	143.7	75.0
„ 17	77.5	77.0	77.0	76.9	77.2	77.3	77.7	78.3	78.6	78.9	79.3	79.9	80.2	80.9	80.9	80.8	80.0	79.1	78.2	78.1	77.9	77.9	77.9	77.9	78.5	143.7	74.2
„ 18	77.8	77.6	77.7	76.9	76.3	76.8	76.7	76.8	77.5	77.5	*78.3	78.2	78.2	78.4	78.3	78.3	78.9	77.7	77.7	77.6	77.1	77.2	76.9	77.0	77.6	143.7	75.7
„ 19	77.0	76.9	76.9	76.7	76.7	76.3	76.9	77.2	77.3	77.7	78.5	78.8	78.6	79.4	79.6	79.0	78.0	77.8	77.9	77.7	76.9	76.1	76.9	76.2	77.5	145.7	74.8
„ 20	76.7	76.7	76.1	76.7	76.0	75.9	75.9	75.1	75.9	72.0	71.7	74.1	72.7	72.8	72.7	72.2	72.6	72.1	73.6	73.7	71.0	69.5	69.2	69.1	73.5	145.8	72.5
„ 21	69.4	69.0	*69.1	*68.9	*69.4	68.8	67.8	68.1	68.7	68.9	69.8	70.7	70.7	71.3	71.9	73.2	72.9	72.1	70.7	70.8	71.2	70.7	69.2	67.2	70.0	140.7	70.3
„ 22	67.2	67.0	66.9	67.0	*66.9	67.2	66.9	67.9	67.8	68.1	69.0	70.8	71.0	70.1	70.7	70.7	70.9	70.4	71.2	71.8	69.9	68.2	68.2	67.3	68.9	143.8	70.7
„ 23	67.1	66.8	66.8	*65.8	65.4	65.1	66.0	65.8	66.3	67.2	68.3	69.5	69.8	70.0	71.0	69.9	69.7	69.0	69.6	67.3	68.6	68.9	69.3	67.7	68.0	142.5	65.6
„ 24	66.7	68.0	67.1	66.8	66.8	66.9	66.3	67.6	68.2	69.3	70.7	70.2	73.5	73.7	73.2	71.6	73.1	71.8	71.9	70.7	70.8	71.4	72.1	70.4	70.0	146.0	67.1
„ 25	68.7	*68.4	*68.1	*67.7	67.1	67.9	68.7	70.0	70.1	71.8	72.9	71.3	74.0	74.1	74.9	74.7	74.3	73.0	72.6	73.1	73.7	73.1	72.2	72.5	71.5	142.4	66.1
„ 26	72.9	72.7	72.0	72.8	72.7	73.2	72.9	73.2	73.9	73.9	74.0	74.6	75.5	75.5	75.7	76.5	76.4	75.8	75.5	75.4	75.0	75.0	75.2	74.8	74.3	120.6	73.0
„ 27	74.9	74.7	74.9	74.9	74.2	74.3	74.8	74.9	75.0	75.1	74.7	75.7	76.2	75.7	75.5	75.5	75.6	75.1	74.9	75.1	75.1	74.6	74.5	74.5	74.9	136.8	72.6
„ 28	75.9	74.0	74.6	73.9	74.7	74.2	73.8	74.3	74.6	74.9	75.6	75.2	75.9	75.8	76.9	76.0	76.0	77.9	75.4	75.7	75.7	75.2	75.1	74.9	75.1	145.8	73.6
„ 29	74.8	74.6	74.0	74.7	74.3	73.9	74.5	74.2	74.9	74.9	76.0	75.6	76.7	76.1	76.3	76.8	76.5	75.3	75.7	75.6	75.6	75.8	75.9	75.6	75.3	148.8	74.3
„ 30	75.6	75.1	75.1	74.9	75.0	74.9	75.2	75.9	75.7	76.7	76.0	76.8	77.4	78.1	76.7	76.7	76.4	75.8	75.8	75.9	75.9	76.1	76.0	75.8	75.9	144.6	74.2
.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hourly Means.	74.8	74.6	74.3	74.2	74.2	74.2	74.5	74.9	75.1	75.1	75.8	75.9	76.7	76.6	77.0	77.0	76.8	76.1	75.9	75.9	75.7	75.5	75.4	75.0	75.5	142.8	73.0

* Interpolated.

TABLE IV.

MEAN HOURLY AND DAILY RELATIVE HUMIDITY AND TENSION OF AQUEOUS VAPOUR FOR THE MONTH OF SEPTEMBER, 1884.

Hour.	Hourly Mean.		Date.	Daily Mean.	
	Humidity.	Tension.		Humidity.	Tension.
			1884.		
1 a	80	0.807	Sept. 1,.....	80	0.871
2 „	81	0.804	„ 2,.....	79	0.872
3 „	81	0.800	„ 3,.....	79	0.858
4 „	82	0.796	„ 4,.....	81	0.878
5 „	82	0.797	„ 5,.....	81	0.896
6 „	82	0.798	„ 6,.....	77	0.869
7 „	81	0.801	„ 7,.....	79	0.903
8 „	77	0.800	„ 8,.....	75	0.866
9 „	74	0.795	„ 9,.....	62	0.741
10 „	71	0.782	„ 10,.....	78	0.772
11 „	71	0.801	„ 11,.....	89	0.845
Noon.	69	0.800	„ 12,.....	89	0.877
1 p	68	0.817	„ 13,.....	87	0.916
2 „	67	0.809	„ 14,.....	86	0.910
3 „	67	0.821	„ 15,.....	85	0.910
4 „	68	0.824	„ 16,.....	85	0.936
5 „	71	0.829	„ 17,.....	83	0.925
6 „	75	0.824	„ 18,.....	83	0.893
7 „	77	0.829	„ 19,.....	79	0.878
8 „	79	0.835	„ 20,.....	61	0.700
9 „	79	0.830	„ 21,.....	54	0.580
10 „	79	0.825	„ 22,.....	53	0.554
11 „	80	0.824	„ 23,.....	56	0.545
Midt.	80	0.812	„ 24,.....	63	0.622
			„ 25,.....	66	0.667
			„ 26,.....	74	0.769
			„ 27,.....	81	0.810
			„ 28,.....	76	0.799
			„ 29,.....	77	0.807
			„ 30,.....	79	0.831
			...	...	...
Mean, ...	76	0.811	Mean, ...	76	0.810

TABLE V.

DURATION OF SUNSHINE.

Date.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	Su
1884.														
Sept. 1,	...	0.3	0.8	1.0	1.0	0.9	0.5	1.0	1.0	1.0	1.0	0.9	...	
„ 2,	...	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.8	0.3	1.0	0.8	...	
„ 3,	...	0.9	1.0	1.0	1.0	0.7	0.6	1.0	1.0	0.9	1.0	0.2	...	
„ 4,	0.1	1.0	1.0	0.3	0.3	...	0.6	1.0	1.0	0.6	0.9	0.9	...	
„ 5,	...	0.7	1.0	1.0	1.0	0.9	1.0	1.0	1.0	1.0	1.0	0.2	...	
„ 6,	...	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	...	1
„ 7,	...	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	...	1
„ 8,	...	...	...	0.8	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.8	...	
„ 9,	...	0.5	1.0	0.8	0.8	1.0	1.0	...	...	...	...	...	...	
„ 10,	...	...	...	...	...	...	..	...	...	...	...	...	...	
„ 11,	...	...	...	...	...	...	...	...	...	...	...	...	...	
„ 12,	...	...	...	...	...	...	...	...	...	...	...	...	...	
„ 13,	...	...	0.3	...	...	...	0.2	0.9	1.0	0.8	0.5	0.6	...	
„ 14,	...	0.5	1.0	1.0	0.9	0.4	0.6	1.0	1.0	1.0	1.0	0.9	...	
„ 15,	...	...	0.6	0.5	0.9	1.0	1.0	1.0	1.0	0.9	0.9	0.8	...	
„ 16,	...	0.7	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.9	...	1
„ 17,	...	0.7	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.7	...	1
„ 18,	...	0.1	0.9	1.0	1.0	0.7	0.5	1.0	1.0	1.0	0.9	0.6	...	
„ 19,	...	0.8	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.8	0.9	0.6	...	
„ 20,	...	0.9	0.7	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.8	...	
„ 21,	...	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.8	...	
„ 22,	...	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.8	...	
„ 23,	...	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.9	...	
„ 24,	...	0.8	1.0	1.0	1.0	1.0	1.0	0.5	0.3	...	...	...	...	
„ 25,	...	0.8	1.0	1.0	1.0	1.0	1.0	1.0	0.7	0.8	0.8	0.4	...	
„ 26,	...	0.2	0.1	0.3	0.9	0.3	1.0	0.9	0.9	1.0	1.0	0.6	...	
„ 27,	...	...	...	...	...	...	...	0.3	0.7	0.3	0.1	0.1	...	
„ 28,	...	0.3	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.6	...	
„ 29,	...	...	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.7	...	
„ 30,	...	0.2	0.7	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.7	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Sums, ...	0.1	15.3	22.1	22.7	23.8	21.9	22.5	24.1	24.4	22.4	22.7	16.1	...	3
Hourly Means, ...	...	...	...	...	...	...	...	...	...	...	...	...	...	

TABLE VI.

RAINFALL FOR THE MONTH OF SEPTEMBER, 1884.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Sums.
Sept. 1,	...	...	0·025	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·025
,, 2,	...	...	...	...	...	...	...	...	...	0·005	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·005
,, 3,	...	...	...	...	...	...	...	...	...	0·010	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·010
,, 4,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
,, 5,	...	...	...	...	...	...	...	...	...	0·005	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·005
,, 6,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
,, 7,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
,, 8,	...	0·165	0·370	0·005	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·540
,, 9,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·005	...	0·040	0·020	...	...	0·065
,, 10,	...	...	...	...	...	...	...	...	...	...	0·005	0·040	0·065	0·165	0·325	0·640	0·440	0·970	1·190	0·520	0·040	0·170	0·365	0·650	5·585
,, 11,	0·950	0·725	0·530	0·340	0·295	0·145	0·240	0·330	0·270	0·070	0·005	0·065	0·015	0·150	...	0·050	0·030	0·005	...	...	0·020	...	0·015	...	4·250
,, 12,	0·020	0·315	0·085	0·305	...	0·005	...	0·115	0·150	0·025	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1·020
,, 13,	...	0·030	...	0·020	0·020	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·070
,, 14,	...	...	...	...	...	...	...	...	...	0·010	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·010
,, 15,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
,, 16,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
,, 17,	0·050	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·050
,, 18,	0·035	0·045	0·030	0·010	0·025	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·145
,, 19,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
,, 20,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
,, 21,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
,, 22,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
,, 23,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
,, 24,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
,, 25,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
,, 26,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·010	0·010
,, 27,	0·050	...	0·030	0·020	...	...	...	...	...	...	0·030	0·370	...	...	...	...	...	...	...	...	...	...	...	...	0·500
,, 28,	...	...	...	...	...	0·070	0·010	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·080
,, 29,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
,, 30,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sums,	1·105	1·280	1·070	0·700	0·340	0·220	0·250	0·445	0·420	0·125	0·040	0·475	0·080	0·315	0·325	0·690	0·470	0·975	1·195	0·520	0·100	0·190	0·380	0·660	12·370

TABLE VII.

DIRECTION AND VELOCITY OF THE WIND, FOR THE MONTH OF SEPTEMBER, 1884.

DATE.	1 a.		2 a.		3 a.		4 a.		5 a.		6 a.		7 a.		8 a.		9 a.		10 a.		11 a.		NOON.		1 p.		2 p.		3 p.		4 p.		5 p.		6 p.		7 p.		8 p.		9 p.		10 p.		11 p.		Midt.		Sums.	Means.
	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.		
Sept. 1	26	4	26	2	31	4	31	3	20	4	25	2	25	2	25	5	25	8	24	10	24	15	24	11	24	10	25	13	2	11	23	13	24	15	23	12	24	8	25	9	26	7	...	1	...	1	24	6	176	7.3
" 2	24	9	24	8	24	10	26	8	26	8	26	5	24	3	22	2	16	3	24	9	23	7	32	13	7	4	29	11	23	5	20	3	28	3	26	3	26	2	...	1	17	4	...	1	17	2	26	2	126	5.2
" 3	16	8	12	7	...	1	30	2	30	3	...	1	...	1	...	1	27	3	28	5	16	6	15	4	23	6	26	8	25	7	2	6	8	13	8	12	8	6	8	4	8	5	...	1	14	2	14	3	115	4.8
" 4	14	2	14	2	12	5	10	2	10	3	10	4	10	5	10	6	10	8	14	10	14	14	8	8	8	6	8	10	9	6	10	4	10	4	10	3	...	1	10	3	8	3	10	2	10	2	...	1	114	4.7
" 5	10	2	10	3	10	2	...	1	...	1	...	1	15	3	18	3	18	2	24	4	26	7	14	8	9	11	13	8	10	10	8	10	11	7	15	5	15	3	15	4	8	4	8	3	8	2	108	4.5
" 6	...	1	8	2	...	1	11	2	...	1	...	0	...	0	15	2	15	2	18	4	24	7	25	8	24	6	24	4	20	5	16	7	16	8	16	6	...	1	...	1	...	0	...	1	...	0	16	2	71	3.0
" 7	...	1	...	1	16	3	...	1	...	0	16	2	16	2	...	1	16	3	22	6	24	7	24	5	11	8	9	6	4	5	26	7	23	3	12	4	9	4	8	6	6	3	6	3	6	2	...	1	84	3.5
" 8	10	2	10	15	32	11	22	5	24	2	...	1	...	1	16	2	20	3	21	4	28	8	23	8	23	13	23	14	22	10	22	5	23	4	28	6	32	8	30	7	28	6	28	8	32	14	32	19	176	7.3
" 9	32	21	32	22	32	22	32	18	32	20	32	23	32	26	...	1	25	1	25	1	23	1	23	1	20	1	18	1	16	1	14	32	13	32	15	31	14	1	12	32	8	1	15	2	18	1	21	1	22	454	18.9
" 10	1	21	1	24	1	24	1	23	1	26	1	30	1	33	1	37	1	39	1	41	1	50	1	47	1	49	1	48	1	48	1	44	1	37	2	46	2	54	3	55	5	64	6	76	6	84	6	89	1091	45.5
" 11	6	87	8	85	9	85	12	75	15	59	18	50	14	59	14	66	14	49	14	53	14	57	15	38	15	34	15	3	15	28	15	25	15	27	15	31	15	25	15	28	14	38	14	36	1122	46.7
" 12	15	21	16	20	15	20	15	27	15	26	15	23	15	19	16	16	16	16	22	15	11	14	15	15	16	16	18	16	14	16	11	15	9	15	10	15	6	10	6	9	6	9	8	9	8	7	5	13	9	346	14.4
" 13	15	15	15	16	15	17	16	17	16	10	16	14	16	8	15	13	17	12	17	12	19	4	13	6	14	5	20	6	15	6	15	10	15	6	...	0	15	3	10	4	...	1	8	3	7	2	30	3	192	8.0
" 14	30	2	30	3	...	0	...	1	2	2	...	0	4	2	4	3	8	3	13	6	4	11	4	5	25	5	25	4	11	10	12	6	6	6	32	3	...	1	...	0	30	5	3	3	3	3	2	...	1	71	3.0
" 15	3	2	...	0	3	2	29	7	22	2	21	2	21	2	21	3	22	8	23	9	24	11	24	10	25	11	24	10	2	7	10	2	4	4	...	0	9	6	9	2	...	1	9	2	...	1	...	0	104	4.3
" 16	...	1	...	1	...	1	...	1	17	3	11	6	11	2	11	6	10	9	9	13	10	15	10	18	9	16	9	21	9	19	8	15	9	12	9	12	9	10	9	6	9	4	9	5	...	5	9	3	207	8.6
" 17	12	10	...	1	12	6	10	4	...	1	9	2	9	4	8	8	8	11	8	15	9	20	9	20	9	18	10	22	10	20	9	21	9	19	8	17	7	15	7	18	8	17	8	16	7	17	7	17	319	13.3
" 18	7	16	7	18	7	15	7	19	7	20	5	18	5	16	6	21	7	25	7	25	7	26	7	25	7	30	7	27	7	30	9	26	9	27	9	24	8	20	8	28	8	26	9	18	8	12	8	10	506	21.1
" 19	7	8	7	12	7	7	5	6	5	7	5	9	4	11	4	12	7	15	8	17	9	17	10	14	10	18	10	16	9	17	8	14	8	10	8	10	8	4	...	1	8	2	...	1	8	3	11	3	234	9.8
" 20	...	1	...	1	11	3	11	2	12	2	11	3	4	3	26	3	18	6	31	12	32	16	32	16	32	20	32	22	31	18	31	14	31	12	31	9	30	8	31	9	31	14	31	15	32	10	229	9.5
" 21	1	9	22	8	22	9	29	12	30	6	16	4	27	8	23	12	24	15	28	17	28	23	27	23	27	26	28	31	27	26	27	17	27	18	26	15	27	15	28	12	30	10	30	12	31	15	30	18	361	15.0
" 22	30	20	30	22	30	19	28	21	28	17	29	18	28	20	28	10	29	19	30	22	31	17	30	18	30	15	28	18	28	18	28	19	28	13	28	14	28	7	28	3	1	5	2	5	2	7	1	9	353	14.7
" 23	1	9	32	10	31	7	30	7	30	11	31	6	31	6	1	13	32	13	1	17	1	10	25	7	24	9	22	8	25	14	28	15	28	17	29	10	28	6	24	6	26	4	26	5	27	5	29	3	218	9.1
" 24	31	5	32	2	7	2	8	3	9	4	11	32	17	32	21	7	20	6	23	8	23	7	16	4	15	8	15	4	24	5	17	7	18	3	20	3	26	4	29	3	...	1	29	4	4	4	151	6.3
" 25	2	15	2	17	3	17	30	7	32	7	32	2	2	8	9	3	4	3	11	4	11	4	23	7	9	10	9	13	8	12	16	7	16	6	16	6	16	4	16	2	16	3	7	5	11	4	11	3	164	6.8
" 26	12	3	...	1	12	2	12	2	...	1	...	0	12	6	2	7	6	6	15	6	15	8	29	8	18	8	17	9	18	9	18	8	16	8	19	7	19	7	22	7	25	7	23	8	23	208	12.4
" 27	6	22	6	24	6	21	5	24	5	25	6	28	5	19	6	19	5	21	6	21	9	27	10	25	8	22	7	24	7	25	7	25	7	25	7	24	8	24	8	24	8	23	8	29	8	30	8	29	578	24.1
" 28	8	30	8	31	8	27	7	30	7	24	6	26	6	28	6	27	6	23	6	25	6	28	6	25	7	24	7	27	7	24	7	21	7	21	7	18	8	15	7	18	8	17	8	25	8	26	8	28	8	26	587	24.5
" 29	7	26	7	25	7	28	7	21	6	22	6	18	5	18	6	17	6	18	7	22	8	22	8	25	8	25	8	17	8	20	9	19	10	20	8	19	8	14	8	14	8	12	8	9	8	4	6	9	444	18.5
" 30	7	10	7	14	7	17	7	18	7	16	7	16	7	17	6	14	7	19	9	20	7	23	8	21	9	23	10	27	9	29	10	26	10	27	10	22	9	19	9	18	8	19	9	18	9	18	9	21	472	19.7
.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	.....	.....
Sums	...	383	...	399	...	393	...	379	...	338	...	320	...	339	...	368	...	392	...	447	...	516	...	464	...	483	...	505	...	469	...	429	...	416	...	363	...	332	...	313	...	327	...	347	...	369	...	384	9471	394.5
Hourly Means	...	12.8	...	13.3	...	13.1	...	12.6	...	11.3	...	10.7	...	11.2	...	12.3	...	13.1	...	14.9	...	17.2	...	15.5	...	16.1	...	16.8	...	15.6	...	14.3	...	13.9	...	12.1	...	11.1	...	10.4	...	10.9	...	11.6	...	12.3	...	12.8	315.7	13.2

TABLE VIII.

MEAN HOURLY COMPONENTS AND MEAN DIRECTION OF THE WIND, FOR SEPTEMBER, 1884.

Hour.	Components (miles per hour).						Direction.
	N	S	E	W	+N-S	+E-W	
1 a.	4.6	1.9	6.8	0.7	+ 2.7	+ 6.1	E 24° N
2 „	3.5	1.7	7.8	0.8	+ 1.8	+ 7.0	E 14° N
3 „	3.7	1.8	7.5	0.8	+ 1.9	+ 6.7	E 15° N
4 „	3.9	3.6	5.9	1.5	+ 0.4	+ 4.4	E 5° N
5 „	4.1	2.9	5.1	1.1	+ 1.2	+ 4.0	E 17° N
6 „	4.2	2.9	4.9	0.7	+ 1.3	+ 4.2	E 17° N
7 „	5.4	2.9	3.9	0.9	+ 2.5	+ 3.1	E 39° N
8 „	4.9	3.5	4.5	1.0	+ 1.4	+ 3.6	E 21° N
9 „	4.3	3.4	5.3	1.5	+ 1.0	+ 3.8	E 14° N
10 „	4.7	3.2	6.1	2.5	+ 1.5	+ 3.7	E 22° N
11 „	4.9	3.2	7.5	3.2	+ 1.7	+ 4.3	E 21° N
Noon.	4.5	2.9	6.4	2.8	+ 1.6	+ 3.6	E 24° N
1 p.	3.9	2.4	7.7	3.0	+ 1.5	+ 4.7	E 17° N
2 „	4.4	3.1	7.7	2.8	+ 1.3	+ 4.9	E 15° N
3 „	4.1	2.4	7.6	2.7	+ 1.8	+ 4.9	E 20° N
4 „	4.0	2.4	6.8	2.2	+ 1.6	+ 4.6	E 19° N
5 „	3.7	2.9	6.4	2.1	+ 0.8	+ 4.4	E 11° N
6 „	3.1	2.1	6.3	1.6	+ 1.0	+ 4.7	E 12° N
7 „	3.2	1.5	6.1	1.0	+ 1.7	+ 5.1	E 18° N
8 „	2.5	1.1	6.7	1.2	+ 1.3	+ 5.6	E 13° N
9 „	3.2	1.1	7.1	0.6	+ 2.1	+ 6.5	E 18° N
10 „	2.7	1.0	8.2	0.5	+ 1.7	+ 7.7	E 12° N
11 „	3.6	1.3	8.2	0.2	+ 2.3	+ 8.0	E 16° N
Midt.	3.9	1.5	8.0	0.6	+ 2.4	+ 7.5	E 18° N
Mean,.....	3.97	2.37	6.60	1.50	1.60	5.10	E 18° N

TABLE IX.

DIRECTION AND FORCE OF THE WIND, AT VICTORIA PEAK, AND SEA DISTURBANCE.

Date.	4 a.			10 a.			4 p.			10 p.		
	Direction.	Force.	Sea.	Direction.	Force.	Sea.	Direction.	Force.	Sea.	Direction.	Force.	Sea.
1884.												
Sept. 1.....	...	...	0	W	2	0	W	3	1	W	3	2
„ 2.....	...	...	0	W	3	0	W	2	0	NW	1	0
„ 3.....	...	...	0	E	2	0	S	2	0	S	2	2
„ 4.....	...	...	0	SE	3	2	S	2	0	S	2	0
„ 5.....	...	...	0	E	2	0	SE	2	0	SE	2	1
„ 6.....	...	...	0	SW	2	0	SW	2	0	SW	2	0
„ 7.....	...	...	0	N	2	0	SW	1	0	S	1	0
„ 8.....	...	...	0	NE	2	2	N	3	2	NNE	4	2
„ 9.....	...	...	4	NNE	5	4	N	4	1	N	5	5
„ 10.....	...	...	6	N	6	6	NNE	7	7	E	9	7
„ 11.....	...	...	6	SSE	8	6	SW	6	5	SW	5	4
„ 12.....	...	...	4	S	5	2	S	4	2	S	4	2
„ 13.....	...	...	2	S	5	2	S	2	2	S	3	2
„ 14.....	...	...	2	W	1	2	W	1	2	NW	2	2
„ 15.....	...	...	1	NW	2	1	NW	3	1	NW	3	0
„ 16.....	...	...	2	E	3	2	E	2	3	E	2	3
„ 17.....	...	...	3	E	3	3	E	4	4	E	4	4
„ 18.....	...	...	5	E	5	5	E	5	5	E	4	5
„ 19.....	...	...	5	E	4	5	E	2	4	N	2	3
„ 20.....	...	...	1	N	5	2	N	5	2	N	5	3
„ 21.....	...	...	2	N	5	2	NW	6	3	N	5	3
„ 22.....	...	...	3	N	5	3	N	4	2	N	4	2
„ 23.....	...	...	1	N	4	1	WNW	4	2	NW	4	2
„ 24.....	...	...	3	N	3	3	S	2	1	NNW	3	0
„ 25.....	...	...	0	E	2	0	S	2	0	NE	3	0
„ 26.....	...	...	2	NE	3	3	E	4	4	E	4	5
„ 27.....	...	...	5	E	4	5	E	5	5	E	5	5
„ 28.....	...	...	5	E	5	5	E	5	5	E	4	5
„ 29.....	...	...	5	E	4	5	E	4	5	E	4	4
„ 30.....	...	...	5	E	4	5	E	4	5	E	4	5
.....	...	...	...	...	...	...	...	...	...	...	...	...
Mean,.....	...	...	2.4	E 25° N	3.6	2.5	E 7° N	3.4	2.5	E 31° N	3.5	2.6

TABLE X.

AMOUNT AND CLASSIFICATION OF CLOUDS AND DIRECTION WHENCE COMING.

Date.	4 a.			10 a.			4 p.			10 p.		
	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction
1884.												
Sept. 1, ...	2	cum.	SE	5	c-cum. / cum.	WNW / S	2	c-cum. / cum.	NNW / W	1	c-cum.	WNW
„ 2, ...	1	sm-cum.	...	1	cum.	WNW	4	c-cum. / cum.	NNE / W	3	c-cum. / cum.	N / W
„ 3, ...	5	nim.	...	4	c-cum. / cum-str.	NNE / WSW	8	c-cum. / cum-str.	W	3	c-str. / cum-str.	ENE / W
„ 4, ...	1	c-cum.	E	8	c-cum. / nim.	E / SSE	5	c-str. / cum-str.	NE	1	c-str.	...
„ 5, ...	1	cum.	SE	4	cum.	E	3	sm-cum. / cum.	NE / E	0	...	...
„ 6, ...	2	cum.	...	1	cum.	E	1	cum.	NE	0	...	...
„ 7, ...	0	...	...	0	...	...	2	c-cum. / cum-str.	N / W	10	c-cum. / cum.	N
„ 8, ...	10	nim.	N	8	c-str. / cum. / c-str.	ESE / NNE /	6	c-str. / cum.	E / N	1	c-str.	...
„ 9, ...	2	c-cum.	NE	8	c-cum. / cum.	ENE / NE	10	str. / R-cum.	NNE	10	nim.	NNE
„ 10, ...	10	nim.	NNE	10	nim.	NNE	10	nim.	NE	10	nim.	ENE
„ 11, ...	10	nim.	E	10	nim.	SSE	10	nim.	S	10	nim.	S
„ 12, ...	10	nim.	S	10	c-cum. / str. / cum-nim.	SSW	10	c-cum. / cum-nim. / c-str.	SW / S /	9	cum-nim.	S
„ 13, ...	7	c-cum. / cum.	SW	10	nim. / c-str.	SSW	7	c-cum / cum str.	SW / SSW	3	cum.	SSW
„ 14, ...	4	sm-cum.	WSW	7	c-cum. / nim.	SW / WSW	6	c-cum. / nim.	SW / WSW	10	cum.	WNW
„ 15, ...	7	cum-nim.	NW	3	cum.	W	3	nim.	WNW	0	...	...
„ 16, ...	2	cum.	ENE	3	cum.	ESE	2	c-str. / cum.	E	1	cum.	E
„ 17, ...	1	cum.	E	3	c-str. / R-cum.	E	4	c-cum. / cum. / c. / cum. / cum-nim.	ESE / E / .... / E / E	4	cum-nim.	E
„ 18, ...	7	nim.	ESE	6	c. / cum.	ENE / ENE	7	c-cum. / cum.	ENE / ENE	2	cum-nim.	E
„ 19, ...	1	cum.	E	1	cum.	ENE	6	c-cum. / cum. / c-str. / cum. / c-str. / sm-cum. / c-str. / sm-cum. / c-cum. / cum.	ENE / ENE / NNE / N / E / N / E / N / SE / NNW	4	cum.	NE
„ 20, ...	0	...	...	1	sm-cum.	N	3	sm-cum. / cum-nim. / c-cum. / cum.	N / N / N / E	0	...	...
„ 21, ...	0	...	...	1	c-str.	...	2			1	c-str.	...
„ 22, ...	0	...	...	1	c-str.	E	2			1	c-str.	...
„ 23, ...	0	...	...	1	c-str. / c-str.	ESE /	5			5	sm-cum.	NNE
„ 24, ...	2	c-cum.	N	4	c-cum. / cum.	N / ESE	8			0	...	...
„ 25, ...	0	...	...	1	str.	...	5	c-str. / cum.	ENE / N	0	...	...
„ 26, ...	2	c-cum.	E	5	c-cum. / cum.	E / NE	2	c-cum. / cum.	E / ENE	3	cum.	E
„ 27, ...	6	nim.	E	9	c-cum. / cum-nim.	ENE	7	c-cum. / cum-nim.	E / E	8	cum.	E
„ 28, ...	4	nim.	E	5	R-cum.	E	3	cum.	E	5	cum.	E
„ 29, ...	3	nim.	E	7	c-cum. / cum.	NNE / E	4	c. / cum.	NNE / E	4	sm-cum.	E
„ 30, ...	2	cum.	E	5	cum.	E	7	c-str. / cum.	SW / E	6	c-str. / cum.	SSW / E
.....	...	...	...	...	...	...	...	...	...	...	...	...
Mean,.....	3.4	...	...	4.8	...	...	5.1	...	...	3.8	...	...

TABLE XI.

VICTORIA PEAK.

Date.	Barometer.			Temperature.						
	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.	Sun.	Max.	Min.	Rad.
1884.	ins.	ins.	ins.	°	°	°	°	°	°	°
1,.....	28.066	27.989	27.983	74.0	76.4	75.0	145.0	76.5	72.0	72.7
2,.....	28.078	28.018	28.031	76.8	78.8	75.2	147.2	79.5	73.0	69.5
3,.....	28.058	28.061	28.085	76.8	75.8	74.8	143.0	79.5	72.0	69.5
4,.....	28.091	28.052	28.068	75.0	76.6	74.8	142.0	78.3	73.0	73.5
5,.....	28.091	28.028	28.054	77.2	76.0	73.8	143.2	79.3	73.0	70.5
6,.....	28.073	28.078	28.018	75.8	77.0	74.4	144.0	79.7	72.0	72.3
7,.....	28.011	27.976	28.021	78.4	80.2	76.6	141.0	82.3	73.0	72.9
8,.....	27.981	27.963	27.906	76.8	81.0	75.8	142.0	82.5	73.0	70.5
9,.....	27.841	27.793	27.761	77.8	78.6	74.4	135.0	80.3	72.0	69.9
10,.....	27.661	27.500	27.392	72.8	70.2	69.8	95.4	72.9	69.0	68.5
11,.....	27.627	27.699	27.864	71.6	71.8	72.2	97.0	73.5	71.0	70.5
12,.....	27.872	27.869	27.919	70.8	72.0	72.8	109.0	73.5	70.8	70.5
13,.....	27.921	27.869	27.890	73.2	73.8	72.6	123.0	74.7	71.0	71.5
14,.....	27.905	27.882	27.867	74.0	76.6	74.0	141.0	78.3	72.0	72.5
15,.....	27.938	27.920	27.930	75.8	76.8	76.1	145.0	78.9	72.0	71.5
16,.....	28.024	27.993	28.010	76.2	75.2	73.8	134.4	76.9	73.0	71.5
17,.....	28.103	28.053	28.076	75.8	75.2	75.2	135.4	77.5	72.0	72.5
18,.....	28.060	28.038	28.056	74.4	73.8	74.6	131.0	76.7	72.6	72.5
19,.....	28.087	28.037	28.086	76.2	75.8	74.6	141.0	76.9	73.0	72.5
20,.....	28.049	27.981	27.958	76.2	79.0	70.8	136.2	79.9	70.8	67.5
21,.....	27.915	27.889	27.919	73.8	74.8	72.8	134.2	76.3	70.0	65.5
22,.....	27.987	27.963	27.974	74.0	74.8	70.8	136.0	74.9	67.6	68.5
23,.....	28.066	28.024	28.022	70.2	71.8	71.0	131.0	74.9	68.0	68.5
24,.....	28.083	28.045	28.070	71.8	72.4	70.8	141.2	76.1	67.0	61.5
25,.....	28.082	28.039	28.071	73.8	72.4	71.8	139.0	75.9	68.0	61.5
26,.....	28.101	28.058	28.103	73.8	73.0	72.6	147.0	76.1	70.0	66.3
27,.....	28.155	28.101	28.133	71.8	71.8	71.8	135.2	72.9	69.0	70.9
28,.....	28.179	28.129	28.151	72.2	72.6	71.8	136.0	75.3	71.0	69.5
29,.....	28.173	28.104	28.140	71.8	72.8	72.2	134.0	74.9	70.0	69.5
30,.....	28.146	28.079	28.108	74.0	72.8	71.8	136.4	75.1	71.0	69.9
.....	...	...	...	...	...	...	...	...	...	...
Mean.....	28.017	27.970	27.991	74.5	75.1	73.3	134.9	77.0	71.1	70.0

TABLE XII.

TEMPERATURE.

Date.	Cape d'Aguilar.					
	4 a.	10 a.	4 p.	10 p.	Max.	Min.
1884.	°	°	°	°	°	°
1,.....	78.8	84.6	86.6	79.9	87.3	78.8
2,.....	79.1	87.1	84.6	79.8	88.1	79.1
3,.....	75.6	83.6	84.6	80.4	88.8	75.2
4,.....	78.1	76.6	82.1	78.8	82.1	75.4
5,.....	77.6	83.6	86.6	80.4	88.2	77.6
6,.....	77.6	85.6	87.4	81.1	87.8	77.6
7,.....	78.6	85.4	87.4	81.6	88.8	78.1
8,.....	77.3	85.6	88.3	85.3	88.8	73.6
9,.....	78.1	86.1	85.6	81.3	88.8	75.6
10,.....	81.1	78.6	74.1	75.6	83.8	74.1
11,.....	75.6	78.6	79.6	79.6	84.8	75.6
12,.....	78.6	80.1	78.6	78.6	80.8	76.6
13,.....	78.1	78.1	82.6	77.9	84.8	75.8
14,.....	77.6	84.1	85.6	79.6	86.8	76.6
15,.....	78.6	84.0	82.6	79.3	86.8	78.6
16,.....	76.9	80.8	81.7	79.8	82.8	75.6
17,.....	79.6	81.6	81.6	80.9	84.8	77.2
18,.....	79.6	80.6	81.6	80.9	82.8	77.6
19,.....	79.4	81.6	83.6	79.4	84.3	78.6
20,.....	78.1	86.6	89.6	81.6	91.0	77.6
21,.....	77.6	85.5	84.8	80.6	88.8	77.6
22,.....	77.7	82.3	86.6	78.2	89.8	76.8
23,.....	75.4	81.6	83.5	77.6	83.8	75.4
24,.....	74.6	79.6	79.6	75.6	82.3	74.6
25,.....	76.5	79.6	81.6	77.1	84.9	75.6
26,.....	75.9	80.0	79.8	79.6	80.8	75.9
27,.....	73.9	75.6	78.9	78.8	80.8	73.7
28,.....	77.7	79.6	79.8	79.2	81.8	77.7
29,.....	78.6	81.6	80.0	79.4	81.6	77.6
30,.....	78.9	80.4	80.0	78.8	81.0	78.8
.....	...	...	...	...	...	...
Mean, ...	77.7	81.9	83.0	79.6	85.2	76.6

HONGKONG OBSERVATORY.

Weather Report for October, 1884.

In the *China Coast Meteorological Register*, based on information transmitted by the Great Northern d the Eastern Extension Telegraph Companies—which I have published daily, is given a summary the atmospheric circumstances in Manila and along the Coast of China between Haiphong and anghai. It also contains information concerning the weather in Nagasaki and Wladivostock.

During the greater part of the month, fresh NE winds with occasional squalls prevailed over the rthern part of the China Sea. A typhoon of very limited extent came up from the East, and passed uthern Luzon on the 26th in about 13° N latitude. The barometer readings reported from Manila ached a maximum 30.03 at 10 a. on the 23rd. The sky was then blue. The following day a ght air blew from NE and clouds came up. On the 25th signs of the typhoon approaching were ticed by the mariners. At 10 a. on the 26th the height of the barometer reported from Manila was .85. The weather was squally and misty. At this time the centre of the typhoon was nearly due uth of Manila. At 4 p. a gentle breeze blew from E. Southerly winds were felt on board ships uth of Luzon. The typhoon passed westward and disappeared in the evening. At 10 a. on the 7th the height of the barometer was 29.95 and one or two tenths of an inch of rain had fallen in anila. During the afternoon, the wind veered to the South blowing in Manila with the force of a ght air, and at Bolinao with the force of a light breeze. On the 28th and following days the sky was ue. No reference to this typhoon was made in the *China Coast Meteorological Register*.

The Barograph and the Standard Barometer at the Observatory are placed at 110 feet above Mean a Level. The bulbs of the Thermograph Thermometers are 111 feet above Mean Sea Level and 6 et above the ground. They are exposed in an unpainted and double-louvered zinc screen fixed to e north wall of the main building in a shaded position. The Solar Radiation Maximum Thermome- r is 109 feet above Mean Sea Level and 4 feet above the ground, and the Terrestrial Radiation inimum Thermometer is about one inch above the ground. The self-recording Rain-gauge is placed 06 feet above Mean Sea Level, and the rim, which is $11\frac{1}{4}$ inches in diameter, is 21 inches above the round. The cups of the Anemograph are 45 feet above the ground, and 150 feet above Mean Sea evel.

At Victoria Peak the Instruments, except the Radiation Thermometers, are placed in the Look- ut. The Barometer is 1821 feet above Sea Level. The bulbs of the Thermometers are about 4 feet ove the floor, except the Maximum Thermometer, which is a few inches higher. The Radiation hermometers are placed at the same height above the ground as at the Observatory. At Cape Aguilar the Thermometers are placed about 170 feet above Sea Level (according to the *Government Gazette*) in a wooden screen 2 feet above the ground, except the Maximum Thermometer, which is a w inches higher.

Table I exhibits the hourly readings of the height of the Barometer reduced to 32°.0 Fahrenheit, ut not to Sea Level, as measured (at two minutes to the hour named) from the Barograms. The ean Height of the Barometer was 29.920, the Highest was 30.102 at 9 a. on the 23rd, and the owest was 29.730 at 5 a. on the 2nd. The Barometric Tide amounted to 0.083.

Table II exhibits the hourly readings of the Temperature (Dry Bulb Thermometer) as measured om the Thermograms (at two minutes past the hour named), and also the Extreme Temperatures uring the day. The Mean Temperature was 77.2, the Highest was 86.2 at 3 p. on the 5th., and the owest was 67.6 at about 6a. on the 16th.

Table III exhibits the hourly readings of the Temperature of Evaporation (Damp Bulb Thermo- eter) as measured from the Thermograms (at two minutes past the hour named) and also the Solar adiation Maximum (Black Bulb) and Terrestrial Radiation Minimum Temperatures.

Table IV exhibits the Mean Relative Humidity in percentage of saturation (the humidity of air saturated with moisture being 100) and Mean Tension of Aqueous Vapour present in the air expressed in inches of mercury, for every hour in the day and for every day in the month. The Mean Tension, which exhibits a small daily variation, was 0.698. The Mean Relative Humidity, which exhibits a great daily variation, was 74.

Table V exhibits the Duration of Sun-shine as registered by aid of the Sun-shine Recorder from half an hour before to half an hour after the hour named. The Sun shone 238.9 hours during the month.

Table VI exhibits the amount of Rain registered from half an hour before to half an hour after the hour named. The Total Rain-fall during the month was 3.085 inches. It rained during 26 hours. The greatest Hourly Rain-fall was 0.730 at 11 a. on the 1st.

Table VII exhibits, for every hour in the day, the Velocity of the Wind and its Direction in numbers (8=E, 16=S, 24=W, 32=N) as measured from the Anemograms. The Velocity is the number of miles traversed by the Wind, from half an hour before to half an hour after the hour named. The Direction is read off at the hour, except when the Wind is very light and changeable, when the average Direction during the hour is estimated, taking into account the Velocity from different quarters. The Direction is not noted when the Velocity is below 1.5 miles an hour.

The Mean Velocity was 15.1 miles an hour. It was greatest during the middle of the day. The greatest Velocity, 37 miles, occurred at 11 a. on the 1st.

The Total Distance travelled by, as well as the Duration and average Velocity of Winds from different quarters were as follows:—

Direction.	*Total Distance.* Miles.	*Duration.* Hours.	*Velocity.* Miles per hour.
N	1395	93	15.0
NE	1206	90	13.4
E	6931	386	18.0
SE	1403	100	14.0
S	113	24	4.7
SW	10	3	3.3
W	91	17	5.4
NW	50	6	8.3
Calm	21	25	0.8

Table VIII exhibits, for every hour in the day, the Velocity of the Wind reduced to 4 and also to 2 Directions, as well as the Mean Direction of the Wind, which exhibits a regular daily variation.

Table IX exhibits the Direction (to two points) and Force of the Wind (0-12) at Victoria Peak. The Average Force of the Wind was 4 corresponding to 23 miles an hour. The Sea Disturbance (0-9) exhibited in the same table has been derived from observations made at Cape d'Aguilar.

Table X exhibits the Amount (0-10), Name and Direction, whence coming, of the Clouds. Where the names of Upper and Lower Clouds are given, but only one Direction, this refers to the Lower Clouds. The Mean Direction of the Lower Clouds was E, and of the Higher, W. On an average 3[illegible] per cent of the sky was clouded.

Table XI and XII exhibit the readings of the Barometer reduced to 32.0 Fahrenheit but not to Sea Level, at Victoria Peak, and the Thermometers at Victoria Peak and at Cape d'Aguilar.

The Mean Height of the Barometer at the Peak was 28.196. The Mean Temperature was 69.[illegible] at the Peak and 76.7 at Cape d'Aguilar, the Highest was 77.3 on the 6th at the Peak and 86.3 on the same day at Cape d'Aguilar, and the Lowest was 59.0 on the 22nd and 23rd, at the Peak, and 67.[illegible] on the 16th and 21st at Cape d'Aguilar.

The Mean Temperature in Hongkong decreased one degree Fahrenheit for every 236 feet ascended.

Table XIII exhibits the Relative Humidity as determined from observations of the Dry and Damp Bulb Thermometers. The Mean Relative Humidity at the Observatory was 74, at Cape d'Aguilar 81, and at Victoria Peak 86. These numbers are reduced to the mean of the 24 hours by aid of Table IV. The Least Relative Humidity registered was 28 at the Observatory, 46 at Cape d'Aguilar and 44 at Victoria Peak.

Table XIV exhibits the Tension of Aqueous Vapour at the Observatory and at the Peak. The Mean Tension was 0.698 at the Observatory, and 0.632 at the Peak. The Greatest Tension registered was 0.906 at 4 p. on the 3rd, at the Observatory, and 0.819 at 10 a. on the 5th at the Peak. The Least Tension was 0.265 at 10 a. and 4 p. on the 22nd at the Observatory, and 0.291 at 10 a. on the same day at the Peak.

Table XV exhibits the amount of Rain measured at 10 a. on the following day, and the duration of Precipitation at the Observatory. The greatest amount fell on the 1st when it rained 1.960 at the Observatory, 1.41 at Stone Cutters' Island, and 1.45 at the Peak.

Faint lightning was observed on the evenings of the 3rd, 6th, 8th, 10th, and 13th.

On the 14th slight thunderstorms passed over at 1.30 p. and 3.15 p.

Unusual visibility was noticed on the 5th, the 11th, the 20th and the 21st.

Dew fell in the evening on the 5th, the 6th, the 8th, the 29th, and the 31st.

TABLE I.

BAROMETRIC PRESSURE FOR THE MONTH OF OCTOBER, 1884.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means.
Oct. 1, ...	29.800	29.778	29.771	29.765	29.759	29.765	29.777	29.797	29.803	29.805	29.831	29.816	29.799	29.777	29.756	29.745	29.745	29.749	29.752	29.778	29.790	29.789	29.775	29.784	29.779
,, 2, ...	.760	.743	.730	.735	.732	.745	.762	.794	.805	.801	.799	.798	.783	.767	.751	.765	.768	.781	.789	.817	.833	.836	.824	.819	.781
,, 3, ...	.819	.814	.810	.813	.815	.825	.860	.895	.896	.908	.910	.889	.878	.848	.850	.850	.855	.858	.878	.897	.906	.910	.918	.907	.867
,, 4, ...	.885	.885	.881	.880	.884	.903	.910	.922	.931	.933	.922	.900	.876	.859	.847	.838	.825	.831	.845	.868	.884	.887	.882	.862	.881
,, 5, ...	.859	.844	.832	.831	.833	.849	.853	.865	.877	.867	.858	.839	.816	.790	.779	.775	.774	.783	.791	.815	.819	.820	.813	.810	.825
,, 6, ...	.802	.788	.782	.780	.792	.806	.820	.828	.844	.850	.835	.817	.796	.778	.755	.748	.748	.751	.764	.791	.808	.824	.827	.828	.798
,, 7, ...	.824	.819	.809	.802	.803	.820	.834	.844	.860	.860	.857	.844	.819	.805	.790	.786	.785	.790	.800	.824	.837	.844	.847	.851	.823
,, 8, ...	.843	.828	.825	.830	.835	.855	.871	.888	.899	.900	.892	.871	.843	.823	.810	.810	.814	.813	.831	.850	.865	.872	.876	.871	.851
,, 9, ...	.865	.859	.855	.859	.871	.886	.896	.908	.912	.912	.910	.885	.866	.847	.841	.837	.837	.851	.866	.891	.903	.908	.888	.876	.876
,, 10, ...	.860	.850	.845	.854	.867	.875	.887	.904	.922	.924	.913	.900	.882	.865	.847	.848	.849	.858	.874	.898	.907	.915	.907	.894	.881
,, 11, ...	.880	.869	.872	.864	.885	.899	.923	.925	.933	.931	.925	.924	.897	.877	.870	.876	.880	.879	.900	.916	.936	.932	.923	.916	.901
,, 12, ...	.907	.895	.886	.884	.888	.899	.926	.939	.936	.942	.936	.924	.898	.878	.864	.864	.860	.874	.886	.909	.926	.930	.914	.911	.903
,, 13, ...	.897	.891	.878	.877	.878	.897	.923	.938	.948	.948	.937	.924	.896	.880	.872	.868	.869	.875	.887	.914	.921	.927	.919	.915	.903
,, 14, ...	29.897	29.884	29.870	29.868	29.871	29.887	29.909	29.926	29.941	29.941	29.932	29.906	29.881	29.866	29.863	29.880	29.890	29.904	29.901	29.934	29.957	29.969	29.971	29.965	.909
,, 15, ...	29.950	29.952	29.937	29.935	29.938	29.962	29.993	30.010	30.020	30.016	30.028	30.009	29.984	29.976	29.962	29.965	29.977	29.986	30.002	30.018	30.029	30.035	30.022	30.015	.988
,, 16, ...	30.005	29.999	29.991	29.990	29.993	30.009	30.023	30.031	30.057	30.058	30.046	30.018	29.992	29.965	29.952	29.951	29.956	29.963	29.975	29.997	30.004	29.999	30.005	29.996	.999
,, 17, ...	29.981	29.979	29.964	29.955	29.951	29.981	29.995	30.016	30.025	30.036	30.020	29.996	29.969	29.949	29.935	29.944	29.953	29.970	29.990	30.016	30.029	30.033	30.020	30.012	29.988
,, 18, ...	30.000	30.002	30.001	30.004	30.010	30.031	30.044	30.059	30.067	30.061	30.045	30.029	30.000	29.985	29.975	29.973	29.989	29.998	30.026	30.047	30.063	30.053	30.047	30.039	30.023
,, 19, ...	30.031	30.019	30.017	30.014	30.016	30.025	30.037	30.053	30.069	30.071	30.054	30.036	30.019	30.003	29.994	29.990	29.988	29.988	29.999	30.015	30.016	30.007	30.002	29.998	30.019
,, 20, ...	29.982	29.960	29.953	29.957	29.959	29.968	29.967	29.970	29.982	29.975	29.953	29.935	29.917	29.899	29.895	29.904	29.910	29.919	29.937	29.963	29.978	29.982	29.977	29.970	29.950
,, 21, ...	29.949	29.938	29.905	29.910	29.935	29.943	29.945	29.967	29.982	29.979	29.961	29.948	29.942	29.929	29.923	29.926	29.944	29.960	29.971	29.997	30.003	30.013	30.011	30.011	29.958
,, 22, ...	30.017	30.003	29.997	30.008	30.020	30.043	30.063	30.081	30.097	30.096	30.076	30.057	30.032	30.014	30.008	30.006	30.014	30.028	30.045	30.064	30.073	30.073	30.066	30.066	30.043
,, 23, ...	30.050	30.037	30.040	30.042	30.046	30.070	30.072	30.089	30.102	30.099	30.083	30.065	30.037	30.010	30.009	30.014	30.015	30.027	30.046	30.068	30.073	30.073	30.072	30.070	30.055
,, 24, ...	30.050	30.042	30.041	30.041	30.041	30.064	30.080	30.090	30.099	30.087	30.068	30.046	30.020	30.009	30.004	29.992	30.001	30.018	30.030	30.050	30.052	30.050	30.033	30.030	30.043
,, 25, ...	30.010	30.004	29.996	29.993	30.007	30.029	30.049	30.064	30.070	30.069	30.052	30.036	30.013	29.991	29.980	29.985	29.989	29.994	30.004	30.017	30.014	30.008	30.004	29.989	30.015
,, 26, ...	29.983	29.973	29.968	29.965	29.969	29.990	30.006	30.016	30.032	30.025	30.010	29.985	29.951	29.927	29.919	29.913	29.908	29.919	29.933	29.953	29.946	29.948	29.942	29.938	29.963
,, 27, ...	29.931	29.914	29.910	29.907	29.915	29.923	29.938	29.956	29.960	29.954	29.930	29.911	29.881	29.869	29.848	29.842	29.846	29.852	29.875	29.886	29.900	29.893	29.893	29.882	29.901
,, 28, ...	29.891	29.865	29.859	29.863	29.873	29.891	29.912	29.924	29.935	29.939	29.922	29.909	29.884	29.862	29.853	29.855	29.863	29.875	29.890	29.915	29.925	29.928	29.924	29.917	29.894
,, 29, ...	29.904	29.897	29.889	29.887	29.895	29.911	29.930	29.934	29.952	29.946	29.931	29.917	29.887	29.871	29.862	29.864	29.874	29.882	29.910	29.920	29.923	29.933	29.931	29.919	29.907
,, 30, ...	29.905	29.894	29.894	29.899	29.905	29.929	29.933	29.953	29.968	29.964	29.942	29.917	29.898	29.887	29.879	29.883	29.893	29.899	29.914	29.926	29.929	29.929	29.929	29.927	29.916
,, 31, ...	29.925	29.912	29.905	29.897	29.902	29.925	29.927	29.942	29.950	29.940	29.926	29.906	29.877	29.853	29.833	29.826	29.826	29.831	29.851	29.855	29.859	29.856	29.860	29.857	29.885
Hourly Means, ...	29.918	29.908	29.900	29.900	29.906	29.923	29.938	29.953	29.964	29.962	29.952	29.934	29.911	29.892	29.881	29.881	29.885	29.894	29.908	29.929	29.939	29.941	29.936	29.930	29.920

TABLE II.

TEMPERATURE FOR THE MONTH OF OCTOBER, 1884.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means.	Max.	Min.
Oct. 1,.....	79.2	79.1	79.0	79.0	78.8	78.3	78.4	78.6	79.9	80.1	76.3	74.9	74.6	75.8	77.2	78.0	77.2	77.7	78.0	78.2	78.0	78.3	78.1	75.8	77.9	80.7	74.5
„ 2,.....	76.5	75.2	76.7	76.9	78.2	79.3	79.8	77.2	77.4	79.9	82.2	82.5	81.1	81.2	80.7	79.1	77.1	77.0	77.1	79.0	79.4	79.4	79.6	79.0	78.8	82.6	75.2
„ 3,.....	79.2	78.1	78.5	78.5	78.8	78.8	79.4	80.5	80.8	82.1	83.6	84.4	85.2	84.5	84.8	82.3	81.3	80.3	80.1	80.0	79.7	79.3	79.2	79.1	80.8	85.7	77.9
„ 4,.....	79.0	79.0	78.8	78.7	78.5	78.1	79.2	80.4	81.0	81.9	82.9	83.3	84.5	83.9	84.0	82.9	81.3	80.3	80.1	79.3	79.2	79.1	78.7	78.7	80.5	84.7	77.8
„ 5,.....	78.3	78.1	77.7	77.4	77.1	77.2	78.1	79.7	81.2	82.1	83.2	84.2	85.2	85.8	86.2	85.1	83.8	81.0	80.1	79.1	79.1	78.5	77.8	77.5	80.6	86.2	77.0
„ 6,.....	77.1	76.6	76.5	76.1	76.0	76.0	76.9	78.2	79.3	81.3	83.9	84.9	84.2	84.4	85.0	85.1	84.2	81.1	79.9	79.0	78.8	78.4	78.1	78.0	80.0	86.3	75.9
„ 7,.....	77.8	77.4	77.2	77.2	77.2	76.9	77.8	79.4	81.0	82.7	84.3	82.9	85.4	84.9	85.4	84.4	83.7	80.7	79.9	79.6	79.6	79.2	79.4	79.3	80.6	85.9	76.9
„ 8,.....	79.1	78.2	77.9	77.2	76.7	76.9	78.5	79.4	81.1	81.7	82.6	83.0	84.2	84.7	85.0	84.3	83.4	80.9	80.1	79.8	79.3	79.2	79.2	79.3	80.5	85.3	76.6
„ 9,.....	79.4	79.3	79.2	79.1	79.0	79.2	79.8	80.7	81.4	82.4	83.1	84.1	84.5	85.1	85.2	84.4	83.7	81.7	80.7	80.2	80.2	80.3	80.1	80.0	81.4	85.3	79.0
„ 10,.....	80.1	80.2	80.0	80.0	79.8	79.9	80.1	81.2	81.7	82.9	83.3	84.0	84.9	85.2	84.9	84.6	83.2	81.2	80.8	80.4	80.5	80.4	80.2	80.0	81.6	85.4	79.3
„ 11,.....	80.0	79.8	79.9	79.0	79.1	79.0	79.3	80.1	81.3	81.8	82.2	83.5	84.4	84.7	84.5	83.9	82.8	80.7	80.2	80.2	80.2	80.2	80.2	80.2	81.1	84.7	78.7
„ 12,.....	80.0	79.8	79.4	79.1	78.8	79.1	79.4	80.1	81.1	81.9	82.5	83.4	84.5	84.9	84.4	84.1	82.4	80.7	80.1	79.9	79.9	79.9	79.8	79.7	81.0	85.1	78.7
„ 13,.....	79.5	79.2	79.1	78.8	78.7	78.4	79.1	80.0	81.2	81.5	82.4	84.1	84.5	84.4	84.4	83.5	82.3	80.2	79.7	79.3	79.1	78.7	78.4	78.3	80.6	84.7	78.3
„ 14,.....	78.2	78.1	77.9	77.7	77.9	77.6	78.5	80.6	81.1	83.6	84.2	81.8	79.0	78.0	79.2	76.7	78.2	78.2	77.3	76.4	74.7	73.6	72.9	71.8	78.0	84.9	71.8
„ 15,.....	71.5	71.1	70.7	70.5	69.7	69.3	69.8	70.5	71.8	73.3	75.6	77.8	78.0	75.4	74.8	74.8	74.2	73.3	73.3	73.1	73.2	72.7	71.8	70.9	72.8	78.1	69.1
„ 16,.....	70.4	69.8	69.0	68.4	67.7	67.7	68.4	69.8	71.0	73.6	74.6	77.0	78.7	78.6	79.1	77.8	76.1	75.0	74.8	74.8	74.4	72.3	71.9	71.4	73.0	79.2	67.6
„ 17,.....	70.9	71.0	71.6	71.6	70.7	69.8	71.2	73.2	74.8	75.6	75.6	77.3	77.8	79.7	79.3	78.7	77.6	76.2	75.9	76.0	75.8	74.5	74.2	75.7	74.8	79.8	69.6
„ 18,.....	75.8	75.6	75.6	74.9	74.7	73.6	74.0	75.2	76.3	77.9	79.1	79.9	80.9	81.1	81.5	80.6	78.1	77.0	76.9	77.1	77.1	77.0	77.1	77.0	77.2	81.7	73.6
„ 19,.....	76.7	76.2	75.9	75.7	75.6	75.6	76.1	76.9	77.8	79.0	80.7	80.7	81.2	78.9	78.9	79.3	78.9	77.2	77.0	76.7	76.0	76.0	75.8	75.4	77.4	81.2	75.4
„ 20,.....	74.6	74.1	73.7	72.9	72.1	71.0	71.5	72.1	74.0	76.0	76.8	78.2	78.6	79.4	79.3	79.1	77.6	75.8	74.9	73.6	72.7	70.8	70.0	69.7	74.5	79.6	69.7
„ 21,.....	69.4	68.8	69.6	68.8	68.6	67.8	68.1	70.1	70.8	72.8	74.6	75.8	76.9	77.1	76.9	76.9	75.9	74.2	73.2	73.5	74.1	73.1	72.1	71.8	72.5	77.8	67.8
„ 22,.....	71.4	70.9	70.6	70.1	69.4	68.7	69.4	70.7	72.0	74.0	75.8	76.0	78.1	79.2	79.5	78.2	76.9	74.1	72.1	71.8	70.7	70.5	69.9	69.3	72.9	79.5	68.7
„ 23,.....	69.2	68.9	68.6	68.6	68.6	68.5	68.9	71.1	73.0	74.2	75.3	76.9	77.9	78.3	78.3	77.8	76.1	73.6	72.9	71.8	71.0	70.7	70.7	69.7	72.5	78.6	68.1
„ 24,.....	70.4	69.7	69.3	69.5	69.4	69.2	69.8	71.3	73.1	74.9	75.9	76.9	77.7	77.8	77.7	77.2	76.0	74.6	74.5	74.5	74.4	74.4	74.1	74.1	73.6	77.9	68.7
„ 25,.....	73.7	73.7	73.4	73.0	72.5	71.8	72.1	72.8	72.9	73.5	73.8	74.5	76.1	75.9	76.0	75.2	73.8	72.8	72.7	72.3	72.8	72.8	72.7	72.4	73.5	76.2	71.8
„ 26,.....	72.0	71.9	71.6	71.0	70.8	70.7	71.2	71.9	72.9	73.2	74.7	75.7	76.5	76.7	76.1	75.6	73.8	72.6	72.2	72.0	72.2	73.0	73.4	73.4	73.1	76.9	70.6
„ 27,.....	73.1	72.7	72.0	71.6	71.7	71.0	71.9	73.0	73.9	74.5	75.8	77.2	78.4	78.3	77.9	76.9	75.3	74.2	74.1	74.3	74.7	74.6	74.9	75.0	74.5	78.8	70.9
„ 28,.....	74.9	74.3	74.3	73.7	73.8	73.8	72.2	72.7	73.9	75.0	75.9	77.2	79.3	79.5	77.9	77.0	76.0	75.8	75.6	75.8	75.8	75.8	75.8	75.5	75.5	79.5	71.8
„ 29,.....	75.7	75.7	75.4	75.6	75.7	75.7	76.1	77.7	79.0	80.1	81.4	81.9	82.9	83.1	82.2	81.1	80.0	78.2	77.9	77.0	76.5	76.3	76.0	75.9	78.2	83.1	75.3
„ 30,.....	75.2	75.0	75.0	74.8	75.0	75.0	75.8	77.7	80.0	81.2	81.7	84.1	83.1	82.5	80.1	79.4	77.9	77.3	77.1	77.0	76.9	76.9	76.8	76.6	78.0	85.0	74.8
„ 31,.....	76.5	76.2	76.1	76.0	75.5	75.3	75.8	76.7	78.1	79.0	78.3	79.2	80.5	80.5	80.3	79.4	78.7	76.6	75.8	75.4	75.0	74.8	74.2	74.2	77.0	80.6	73.8
Hourly Means, ...	75.6	75.3	75.2	74.9	74.7	74.5	75.1	76.1	77.3	78.5	79.4	80.2	80.9	81.0	80.9	80.1	79.0	77.4	76.9	76.7	76.5	76.2	75.9	75.6	77.2	82.0	74.8

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means.	Sun.	Rad.
Oct. 1,.....	75.8	75.8	75.2	74.8	75.1	74.3	74.0	74.0	74.9	74.9	74.9	73.1	72.2	73.1	73.3	74.7	74.4	75.0	74.6	74.9	74.9	75.0	75.9	74.3	74.5	122.9	71.5
„ 2,.....	74.9	74.0	74.7	74.2	76.0	76.2	75.8	73.9	74.8	75.3	77.2	76.9	76.2	76.3	76.4	75.4	75.2	76.0	75.3	76.4	76.8	76.9	76.9	76.5	75.8	131.3	72.6
„ 3,.....	76.1	76.3	76.3	76.2	76.0	76.2	76.6	77.3	77.4	78.0	77.8	78.0	79.7	79.1	79.4	78.1	77.8	77.0	76.9	76.7	76.5	76.3	76.7	76.5	77.2	146.7	74.5
„ 4,.....	76.6	76.9	76.6	76.4	76.5	76.0	76.9	77.3	77.5	77.9	78.0	78.3	79.1	78.9	78.8	77.5	77.0	76.2	76.5	76.1	76.2	76.0	75.7	75.6	77.0	143.8	75.8
„ 5,.....	75.7	75.6	75.6	75.6	75.0	75.0	76.0	76.3	77.3	77.8	77.9	78.3	78.7	79.0	79.5	78.5	78.2	76.5	76.3	75.8	76.1	75.9	75.6	75.6	76.7	143.7	72.0
„ 6,.....	75.4	74.9	74.8	74.6	74.4	74.2	75.0	74.9	75.0	75.6	77.1	*76.9	76.7	76.1	76.8	78.1	78.1	76.7	75.7	75.0	74.9	75.6	75.0	74.8	75.7	142.4	70.9
„ 7,.....	74.6	74.7	74.6	74.1	74.6	74.7	75.5	75.6	76.1	76.7	77.8	76.9	78.4	78.2	78.8	78.0	77.8	75.7	75.8	76.1	76.3	76.2	75.7	75.7	76.2	150.0	73.0
„ 8,.....	75.8	74.7	75.4	74.5	74.3	74.7	75.4	75.5	76.6	76.0	76.9	76.7	77.4	77.8	78.1	77.9	77.8	76.7	76.3	76.3	76.6	76.8	75.9	75.7	76.2	142.0	72.2
„ 9,.....	75.9	75.6	74.9	74.9	74.6	74.9	74.9	74.7	74.8	75.2	75.0	76.0	76.6	77.7	77.8	77.1	76.3	76.6	76.8	76.4	76.4	76.2	75.8	75.8	75.9	139.8	75.5
„ 10,.....	75.8	76.0	75.9	75.6	75.1	74.8	75.3	75.1	75.0	75.0	75.6	*76.2	76.7	77.0	77.2	78.0	76.9	76.3	75.8	75.9	76.1	76.0	75.9	74.7	75.9	146.2	75.5
„ 11,.....	75.0	75.0	75.5	74.5	74.6	74.0	74.1	74.0	74.8	74.2	74.7	74.8	76.0	75.7	76.0	76.0	76.3	75.2	75.1	75.8	76.2	76.0	76.0	75.8	75.2	139.8	74.4
„ 12,.....	75.4	75.9	75.0	74.0	74.0	74.8	74.8	74.9	74.9	75.3	75.4	75.8	75.7	76.5	76.3	76.9	76.6	75.8	75.8	75.7	75.8	75.7	75.7	75.6	75.5	141.8	75.7
„ 13,.....	75.5	75.7	75.1	75.0	74.3	74.2	74.0	74.3	75.0	75.1	75.4	76.7	76.8	77.0	77.1	76.7	75.8	75.5	75.1	74.9	75.5	75.2	75.1	75.0	75.4	139.8	75.3
„ 14,.....	75.1	74.9	74.7	74.4	74.6	74.0	74.7	75.8	76.1	77.4	75.2	75.6	75.1	74.7	72.7	72.7	71.1	70.1	67.7	*66.8	*65.9	65.0	65.5	64.0	72.2	150.0	71.4
„ 15,.....	63.7	63.5	63.5	62.9	62.8	62.2	62.4	62.7	63.6	64.7	66.4	67.8	68.0	65.9	65.7	65.9	65.9	65.6	65.0	64.1	64.1	64.5	63.8	64.1	64.5	149.8	69.5
„ 16,.....	62.7	62.2	61.2	60.7	60.6	59.9	60.3	61.2	62.0	65.1	64.0	66.8	68.0	68.5	68.3	68.6	67.6	67.0	67.7	67.3	67.4	68.0	68.5	68.2	65.1	138.9	61.9
„ 17,.....	66.8	66.0	66.2	66.5	65.5	64.9	65.9	67.0	67.8	67.8	67.8	68.6	69.6	70.4	70.2	70.5	69.7	69.5	69.8	70.5	70.9	71.5	71.2	70.9	68.6	136.5	64.4
„ 18,.....	71.1	70.3	70.3	70.0	69.0	68.7	68.7	69.5	70.0	71.2	71.5	71.6	71.6	72.2	73.2	72.5	71.8	71.2	71.8	72.5	72.7	72.6	72.7	72.8	71.2	138.4	69.1
„ 19,.....	72.5	72.1	72.0	71.1	71.5	71.6	71.8	71.9	72.0	72.9	73.0	73.0	73.0	70.6	70.6	70.3	70.7	70.6	69.5	68.7	68.7	68.0	67.8	67.8	70.9	144.1	69.9
„ 20,.....	66.4	*66.2	*66.0	*65.9	*65.6	*65.2	*65.3	*65.4	*65.5	66.2	66.1	66.9	67.0	67.0	66.6	68.4	66.1	65.1	65.0	64.4	63.0	61.7	61.0	60.5	65.3	137.8	64.5
„ 21,.....	59.4	58.5	57.3	57.2	58.1	57.9	57.3	60.8	60.0	58.9	59.2	60.2	60.9	61.1	61.0	61.3	61.3	61.0	60.6	60.0	59.0	58.9	58.7	58.2	59.4	138.5	60.7
„ 22,.....	57.9	57.5	57.0	56.8	56.7	56.7	56.8	56.0	56.8	57.8	59.0	60.4	61.2	62.1	62.8	59.6	64.5	63.8	63.7	62.9	64.0	64.0	65.8	65.0	60.4	138.3	61.1
„ 23,.....	64.5	63.8	64.2	64.6	63.9	62.1	62.0	62.0	64.6	65.5	66.0	67.6	67.8	67.8	67.3	66.8	66.0	65.0	65.0	65.1	65.2	65.0	65.7	65.5	65.1	136.1	58.6
„ 24,.....	65.7	66.0	66.0	65.2	65.0	65.5	65.2	65.7	65.6	64.7	63.6	64.0	63.9	64.7	65.5	67.1	66.9	66.9	67.1	67.7	68.2	67.9	68.0	68.5	66.0	135.6	60.3
„ 25,.....	67.8	67.2	68.7	68.5	67.8	67.0	66.8	66.5	66.3	66.6	67.2	67.4	67.9	67.5	68.0	67.3	67.1	66.5	66.8	66.7	66.6	66.4	66.5	66.9	67.2	132.6	70.1
„ 26,.....	66.5	66.9	66.4	66.3	65.9	64.0	64.0	64.8	64.3	64.2	65.2	65.7	66.2	67.2	67.1	66.7	66.0	65.8	66.0	66.6	67.0	67.2	67.6	67.6	66.0	132.6	67.6
„ 27,.....	67.7	68.2	67.9	67.7	67.4	66.7	66.4	67.1	67.3	67.0	67.5	67.6	68.3	69.2	69.6	68.8	68.8	68.9	69.0	69.4	69.7	70.0	70.2	70.6	68.4	135.6	67.6
„ 28,.....	71.1	71.3	71.3	71.9	70.5	70.2	70.0	70.2	70.8	71.1	71.0	71.3	71.8	71.7	72.0	71.7	72.0	71.8	71.5	72.0	72.3	72.6	72.8	72.8	71.5	138.2	69.6
„ 29,.....	73.1	72.8	73.0	73.0	72.6	72.3	72.8	73.1	73.9	74.3	74.8	75.6	76.6	76.8	76.8	75.9	75.4	74.2	74.7	74.0	73.8	74.0	74.0	73.9	74.2	141.2	71.4
„ 30,.....	73.7	73.5	72.9	72.7	72.4	72.9	72.5	73.9	74.4	74.7	75.0	75.3	75.8	76.4	75.1	74.6	74.0	73.8	73.8	73.6	73.8	73.5	73.1	72.3	73.9	154.7	70.0
„ 31,.....	72.4	71.9	71.9	71.7	*71.4	*70.7	*71.0	*72.3	*72.5	73.1	72.9	72.9	73.8	73.4	73.9	73.6	73.5	72.4	72.1	71.9	71.8	72.0	71.6	71.6	72.3	141.0	69.2
Hourly Means,.....	71.0	70.8	70.6	70.4	70.2	69.9	70.1	70.4	70.9	71.3	71.6	72.0	72.5	72.6	72.6	72.4	72.1	71.6	71.4	71.3	71.4	71.3	71.3	71.1	71.3	140.3	69.5

* Interpolated.

TABLE IV.

MEAN HOURLY AND DAILY RELATIVE HUMIDITY AND TENSION OF AQUEOUS VAPOUR FOR THE MONTH OF OCTOBER, 1884.

Hour.	Hourly Mean.		Date.	Daily Mean.	
	Humidity.	Tension.		Humidity.	Tension.
			1884.		
1 a	79	0.710	Oct. 1,.....	84	0.809
2 „	79	0.706	„ 2,.....	87	0.852
3 „	79	0.700	„ 3,.....	85	0.887
4 „	79	0.695	„ 4,.....	85	0.882
5 „	79	0.690	„ 5,.....	88	0.867
6 „	79	0.681	„ 6,.....	81	0.832
7 „	77	0.681	„ 7,.....	80	0.845
8 „	74	0.679	„ 8,.....	81	0.847
9 „	71	0.681	„ 9,.....	77	0.822
10 „	69	0.682	„ 10,.....	76	0.819
11 „	67	0.682	„ 11,.....	74	0.796
Noon.	65	0.687	„ 12,.....	76	0.810
1 p	64	0.697	„ 13,.....	77	0.811
2 „	65	0.700	„ 14,.....	74	0.774
3 „	66	0.702	„ 15,.....	61	0.497
4 „	67	0.704	„ 16,.....	63	0.515
5 „	70	0.707	„ 17,.....	72	0.618
6 „	74	0.709	„ 18,.....	73	0.684
7 „	75	0.707	„ 19,.....	71	0.670
8 „	75	0.706	„ 20,.....	58	0.502
9 „	77	0.713	„ 21,.....	42	0.334
10 „	77	0.713	„ 22,.....	44	0.360
11 „	79	0.717	„ 23,.....	65	0.521
Midt.	79	0.714	„ 24,.....	65	0.539
			„ 25,.....	71	0.584
			„ 26,.....	67	0.546
			„ 27,.....	72	0.615
			„ 28,.....	81	0.719
			„ 29,.....	82	0.799
			„ 30,.....	82	0.783
			„ 31,.....	78	0.731
Mean, ...	74	0.698	Mean,.....	73	0.697

TABLE V.

DURATION OF SUNSHINE.

Date.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.
1884.													
Oct. 1,	...	...	0.3	0.5	...	...	...	...	...	...	...	...	...
„ 2,	...	...	...	...	...	0.1	...	0.1	...	...	...	...	...
„ 3,	...	0.1	0.5	0.6	0.6	1.0	1.0	0.9	0.9	0.7	...	...	...
„ 4,	...	...	0.6	0.9	0.9	1.0	1.0	1.0	1.0	0.8	0.9	0.3	...
„ 5,	...	0.8	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.9	0.2	...
„ 6,	...	0.8	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.9	0.6	...
„ 7,	...	0.8	1.0	0.9	1.0	1.0	0.7	1.0	1.0	1.0	1.0	0.8	...
„ 8,	...	0.3	0.7	0.7	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.7	...
„ 9,	...	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.7	...
„ 10,	...	0.2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.6	...
„ 11,	...	0.4	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.7	...
„ 12,	...	...	0.8	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.7	...
„ 13,	...	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.7	...
„ 14,	...	0.1	0.6	0.7	0.9	0.8	0.3	0.1	0.1	0.4	...	...	...
„ 15,	...	...	...	0.5	1.0	1.0	0.8	0.6	...	...	...	...	...
„ 16,	...	0.7	1.0	1.0	1.0	0.7	1.0	1.0	1.0	0.7	0.1	...	...
„ 17,	...	0.1	1.0	0.9	1.0	1.0	1.0	1.0	1.0	0.7	0.2	0.1	...
„ 18,	...	...	0.1	0.6	1.0	1.0	0.9	1.0	1.0	1.0	0.8	...	...
„ 19,	...	...	...	0.5	1.0	0.5	...	...	...	0.2	1.0	0.4	...
„ 20,	...	0.8	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.7	...
„ 21,	...	0.8	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.7	...
„ 22,	...	0.8	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	...
„ 23,	...	0.7	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	...
„ 24,	...	0.7	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.4	...
„ 25,	...	...	0.7	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	...
„ 26,	...	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.3	...
„ 27,	...	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	...
„ 28,	...	...	...	...	...	...	...	0.8	0.6	...	...	...	...
„ 29,	...	...	...	...	0.3	...	0.1	...	0.3	0.5	0.2	...	...
„ 30,	...	...	0.4	0.9	0.6	1.0	0.9	1.0	1.0	0.6	0.2	...	...
„ 31,	...	...	0.6	0.8	1.0	0.9	1.0	1.0	1.0	1.0	1.0	0.2	...
Sums,.....	...	10.1	21.3	24.5	26.3	26.0	24.7	25.5	24.9	23.6	21.2	10.8	...
Hourly Means, ...	...	...	...	...	...	...	...	...	...	...	...	...	...

TABLE VI.

RAINFALL FOR THE MONTH OF OCTOBER, 1884.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Sums.
Oct. 1,	...	...	...	...	...	...	...	...	...	...	0·730	0·285	0·040	...	...	...	...	...	...	...	...	...	0·145	0·150	1·350
,, 2,	0·110	0·140	0·060	...	...	...	...	0·240	0·060	...	...	...	...	...	...	0·100	0·100	0·105	0·010	...	0·015	...	...	0·015	0·955
,, 3,	...	0·130	...	...	...	...	...	...	...	...	...	...	...	...	0·010	...	...	...	...	...	...	...	...	...	0·140
,, 4,	...	...	0·015	...	...	0·010	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·025
,, 5,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
,, 6,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
,, 7,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
,, 8,	...	0·060	0·035	0·035	0·020	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·150
,, 9,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
,, 10,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
,, 11,	...	...	0·040	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·040
,, 12,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
,, 13,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
,, 14,	...	...	...	...	...	...	...	...	...	...	...	...	0·105	0·015	0·080	...	...	...	...	...	...	...	...	...	0·200
,, 15,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
,, 16,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·010	0·030	...	0·040
,, 17,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·110	...	...	0·110
,, 18,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
,, 19,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
,, 20,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
,, 21,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
,, 22,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
,, 23,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
,, 24,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
,, 25,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
,, 26,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
,, 27,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
,, 28,	...	0·005	...	0·035	0·010	...	0·005	0·010	0·010	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·075
,, 29,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
,, 30,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
,, 31,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sums,	0·110	0·335	0·150	0·070	0·030	0·010	0·005	0·250	0·070	...	0·730	0·285	0·145	0·015	0·090	0·100	0·100	0·105	0·010	...	0·015	0·120	0·175	0·165	3·085

TABLE VII.

DIRECTION AND VELOCITY OF THE WIND, FOR THE MONTH OF OCTOBER, 1884.

DATE.	1 a.		2 a.		3 a.		4 a.		5 a.		6 a.		7 a.		8 a.		9 a.		10 a.		11 a.		Noon.		1 p.		2 p.		3 p.		4 p.		5 p.		6 p.		7 p.		8 p.		9 p.		10 p.		11 p.		Midt.		Sums.	Means.
	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.		
Oct. 1	8	19	8	20	8	28	7	22	7	24	6	24	6	26	7	25	7	28	7	29	10	37	10	32	9	23	8	21	7	23	8	30	9	30	9	30	8	33	9	33	8	29	9	28	10	27	10	22	643	26.8
" 2	8	18	8	20	11	30	10	26	10	29	11	31	11	34	13	34	13	26	12	27	11	29	11	27	11	21	12	23	13	20	13	17	8	8	10	10	9	18	12	20	13	19	12	16	13	16	13	12	531	22.1
" 3	12	20	10	18	10	20	10	21	10	20	11	21	10	19	11	20	10	24	10	20	12	18	13	19	11	18	10	19	10	16	10	19	10	18	10	15	9	15	10	15	10	16	10	14	10	12	10	14	431	18.0
" 4	10	13	10	9	10	9	10	10	9	12	8	5	10	9	9	16	9	22	9	20	9	19	9	20	9	21	8	20	9	19	10	23	10	23	11	14	12	11	11	8	11	7	11	10	11	10	10	12	341	14.2
" 5	11	11	11	6	...	1	...	1	8	3	...	1	...	1	6	4	10	8	11	10	9	13	9	12	9	13	9	10	9	11	9	10	12	9	15	7	13	6	13	4	16	4	16	2	16	3	16	2	152	6.3
" 6	...	0	16	2	...	0	16	2	...	1	16	3	...	1	23	3	25	4	23	4	15	2	16	2	23	6	24	8	24	6	16	8	16	7	16	7	16	6	16	7	16	5	16	4	12	7	11	2	97	4.0
" 7	...	1	...	1	11	2	11	2	...	0	11	3	11	2	9	5	8	8	10	10	9	14	9	14	9	16	9	18	10	17	9	13	9	12	8	12	7	11	7	10	7	9	9	12	7	13	7	12	217	9.0
" 8	8	7	11	15	5	11	6	10	8	12	10	8	6	9	6	13	7	16	8	19	7	19	7	18	7	17	8	17	11	18	10	16	10	15	8	10	8	10	7	10	6	7	6	7	6	8	7	11	303	12.6
" 9	7	12	7	12	6	18	6	17	6	21	6	18	6	20	6	18	6	21	6	23	5	26	8	23	8	21	9	20	9	20	9	18	9	11	11	10	8	15	8	14	8	12	7	13	7	19	7	20	422	17.6
" 10	7	22	7	22	7	20	7	19	6	19	7	26	7	23	7	25	7	26	7	28	7	29	7	24	8	26	8	28	8	19	9	21	7	17	8	21	8	18	8	16	8	17	8	21	8	18	7	24	524	21.8
" 11	7	26	7	31	7	26	7	26	6	26	6	25	7	21	6	20	6	21	7	22	8	27	8	23	9	23	9	24	9	19	9	17	9	20	7	16	8	18	7	17	7	14	7	21	7	22	7	21	526	21.9
" 12	7	26	6	22	6	20	5	15	7	17	7	21	7	19	7	21	7	21	8	20	7	27	7	20	7	20	10	26	10	25	10	22	8	23	8	20	8	17	7	14	8	17	8	16	8	19	7	20	482	20.1
" 13	7	19	7	20	8	19	7	16	7	15	6	18	4	11	5	13	8	16	7	18	8	20	9	20	9	23	10	24	10	23	9	20	10	14	10	10	8	11	7	11	6	9	7	10	7	8	6	9	372	15.5
" 14	6	10	7	9	5	7	6	6	7	5	6	4	5	2	5	6	2	4	10	6	32	7	25	11	28	14	15	9	1	8	28	6	1	8	3	12	2	28	2	29	2	32	2	21	2	9	2	20	273	11.4
" 15	1	24	1	21	1	13	1	22	1	20	1	20	1	26	1	24	1	22	1	21	2	15	4	16	5	13	32	14	32	12	32	12	1	8	1	7	32	11	1	15	1	17	1	14	1	16	1	10	393	16.4
" 16	1	14	1	16	1	22	1	16	32	15	32	19	32	13	1	16	32	11	6	5	4	5	8	8	11	15	11	13	12	8	11	10	8	14	7	12	8	10	4	8	6	12	6	8	7	2	21	4	276	11.5
" 17	32	9	32	11	2	10	3	9	3	6	1	9	3	10	4	18	5	22	6	18	7	20	7	19	9	21	10	19	10	18	10	15	8	13	8	13	6	9	4	8	6	8	5	11	6	14	6	20	330	13.7
" 18	4	14	3	10	2	12	2	9	3	9	2	8	3	8	3	6	6	15	6	12	5	12	6	14	9	19	8	13	10	14	8	15	7	14	7	12	6	9	6	12	7	14	7	18	7	19	7	19	307	12.8
" 19	6	17	6	19	5	14	5	13	4	14	4	15	4	12	5	13	4	9	5	9	5	9	7	10	7	8	1	11	2	9	1	7	6	4	1	2	32	8	32	11	32	9	32	10	32	11	1	11	255	10.6
" 20	1	19	2	18	3	15	32	4	3	13	5	14	2	20	1	18	1	13	3	4	26	8	24	6	26	13	30	12	31	12	72	10	31	11	31	12	1	13	1	11	1	17	32	17	2	13	2	12	305	12.7
" 21	1	11	2	13	2	33	2	22	30	6	14	8	28	8	12	10	12	5	1	21	2	16	32	12	1	11	1	12	1	16	1	12	1	9	1	9	32	9	32	18	2	20	1	23	1	26	1	23	348	14.5
" 22	1	26	1	24	1	24	1	23	1	17	1	16	1	17	1	26	1	23	1	16	6	16	6	11	5	12	6	10	4	11	3	12	12	11	12	8	12	3	...	1	...	1	12	2	...	1	12	2	313	13.0
" 23	...	1	...	1	12	2	12	3	...	1	12	2	11	3	8	9	6	11	8	14	8	15	9	18	10	17	10	18	11	16	11	15	10	12	9	9	8	6	8	4	8	2	9	3	10	3	10	3	188	7.8
" 24	...	1	11	2	...	1	...	0	...	1	7	7	4	8	3	4	5	10	8	18	7	27	7	27	7	29	7	23	7	23	...	21	8	18	7	18	7	16	8	19	7	18	7	21	7	23	8	26	368	15.1
" 25	8	24	7	23	7	26	6	25	6	26	6	24	6	26	7	25	7	28	6	28	6	28	7	25	7	27	7	26	8	27	7	24	8	22	8	19	8	20	8	17	8	19	8	20	8	21	7	23	573	23.9
" 26	7	22	7	24	6	24	6	24	7	22	7	24	7	25	7	26	7	28	7	26	8	23	9	21	9	19	10	22	11	20	10	20	8	16	8	13	7	10	7	9	7	14	8	19	8	17	7	19	487	20.3
" 27	7	18	6	18	6	17	5	13	6	15	6	14	4	17	7	19	6	23	7	24	8	22	8	19	9	21	8	20	9	19	7	19	8	21	8	18	8	18	8	23	8	25	8	23	8	23	7	21	470	19.6
" 28	7	22	7	24	7	22	7	25	7	22	7	21	7	22	7	18	7	17	6	14	8	13	7	13	7	16	7	24	9	24	7	18	8	13	9	10	9	8	10	5	9	8	7	10	7	13	8	10	392	16.3
" 29	7	7	7	9	8	8	9	7	7	5	7	6	7	4	7	3	9	7	10	8	11	10	9	12	9	10	9	8	9	10	8	6	16	10	16	6	16	3	16	3	24	3	26	2	26	3			154	6.4
" 30	23	3	19	3	23	4	23	4	23	3	...	1	16	2	...	1	22	5	23	5	24	6	10	21	10	30	9	30	9	29	9	27	9	27	9	24	8	25	9	25	9	27	9	25	8	27	9	27	381	15.9
" 31	8	25	8	23	8	21	8	23	7	22	7	21	7	22	8	24	8	22	8	25	7	18	8	17	9	19	10	17	9	17	9	16	11	9	11	8	11	6	10	8	10	4	...	1	...	1	10	2	371	15.5
Sums,	...	461	...	466	...	477	...	435	...	422	...	432	...	440	...	482	...	516	...	524	...	550	...	534	...	562	...	548	...	529	...	499	...	447	...	394	...	403	...	400	...	416	...	424	...	423	...	436	11220	467.8
Hourly Means,	...	14.9	...	15.0	...	15.4	...	14.0	...	13.6	...	13.9	...	14.2	...	15.5	...	16.6	...	16.9	...	17.7	...	17.2	...	18.1	...	17.7	...	17.1	...	16.1	...	14.4	...	12.7	...	13.0	...	12.9	...	13.4	...	13.7	...	13.6	...	14.1	361.9	15.1

TABLE VIII.

MEAN HOURLY COMPONENTS AND MEAN DIRECTION OF THE WIND, FOR OCTOBER, 1884.

Hour.	Components (miles per hour).						Direction.
	N	E	S	W	+N-S	+E-W	
1 a.	3.9	10.7	0.8	0.1	+ 3.1	+ 10.6	E 16° N
2 „	4.1	11.1	1.0	0.1	+ 3.1	+ 11.0	E 16° N
3 „	5.4	10.8	1.1	0.1	+ 4.3	+ 10.7	E 22° N
4 „	5.0	9.8	0.8	0.1	+ 4.2	+ 9.7	E 23° N
5 „	4.0	10.4	0.5	0.2	+ 3.5	+ 10.2	E 19° N
6 „	4.4	9.9	1.7	0.0	+ 2.6	+ 9.9	E 15° N
7 „	4.7	10.0	1.0	0.2	+ 3.7	+ 9.8	E 21° N
8 „	4.8	11.2	1.5	0.1	+ 3.4	+ 11.1	E 17° N
9 „	4.3	12.7	1.1	0.2	+ 3.2	+ 12.5	E 14° N
10 „	3.4	13.5	1.3	0.3	+ 2.1	+ 13.3	E 9° N
11 „	2.1	15.2	1.6	0.4	+ 0.5	+ 14.7	E 2° N
Noon.	1.0	15.3	1.7	0.5	— 0.7	+ 14.7	E 3° S
1 p.	1.5	15.7	1.8	0.8	— 0.1	+ 14.8	E 1° S
2 „	1.6	14.5	2.7	0.4	— 1.0	+ 14.1	E 4° S
3 „	2.0	13.7	3.1	0.2	— 1.1	+ 13.5	E 5° S
4 „	1.7	12.9	2.5	0.1	— 0.8	+ 12.8	E 3° S
5 „	1.2	12.0	2.1	0.0	— 0.9	+ 12.0	E 4° S
6 „	1.2	10.4	1.9	0.0	— 0.7	+ 10.4	E 4° S
7 „	2.3	10.5	0.9	0.0	+ 1.4	+ 10.5	E 8° N
8 „	2.9	9.7	1.4	0.0	+ 1.5	+ 9.7	E 9° N
9 „	3.2	10.0	1.3	0.0	+ 2.0	+ 10.0	E 11° N
10 „	3.1	10.3	0.9	0.1	+ 2.1	+ 10.2	E 12° N
11 „	2.6	10.6	1.3	0.1	+ 1.3	+ 10.5	E 7° N
Midt.	2.6	11.1	1.1	0.2	+ 1.5	+ 11.0	E 8° N
Mean,.....	3.04	11.75	1.46	0.17	+ 1.58	11.58	E 8½° N

TABLE IX.

DIRECTION AND FORCE OF THE WIND, AT VICTORIA PEAK, AND SEA DISTURBANCE.

Date.	4 a.			10 a.			4 p.			10 p.		
	Direction	Force.	Sea.	Direction	Force.	Sea.	Direction	Force.	Sea.	Direction	Force.	Sea.
1884.												
Oct. 1,.....	...	...	5	E	4	5	E	5	5	E	5	5
„ 2,.....	...	...	5	SE	6	4	SE	5	4	SE	5	4
„ 3,.....	...	...	4	SE	4	4	SE	4	4	ESE	4	4
„ 4,.....	...	...	4	SE	4	3	SE	4	4	SE	3	3
„ 5,.....	...	...	2	E	3	2	E	2	2	E	2	2
„ 6,.....	...	...	1	ESE	1	1	S	3	0	S	2	0
„ 7,.....	...	...	2	E	2	2	E	3	2	E	3	3
„ 8,.....	...	...	4	E	4	5	E	4	4	E	4	4
„ 9,.....	...	...	4	E	5	5	E	4	4	E	4	5
„ 10,.....	...	...	6	E	5	6	E	5	5	E	5	5
„ 11,.....	...	...	6	E	5	6	E	5	4	E	4	5
„ 12,.....	...	...	5	E	5	5	E	4	5	E	4	4
„ 13,.....	...	...	4	E	5	4	E	4	4	E	4	4
„ 14,.....	...	...	3	E	3	3	N	5	3	N	5	5
„ 15,.....	...	...	5	N	5	5	NE	3	5	NE	4	5
„ 16,.....	...	...	5	N	4	5	NNE	3	5	E	4	5
„ 17,.....	...	...	5	ENE	4	5	E	4	5	E	4	5
„ 18,.....	...	...	5	E	4	6	E	3	5	E	3	5
„ 19,.....	...	...	5	NNE	3	5	NNE	3	4	E	3	4
„ 20,.....	...	...	4	NNE	3	4	NNW	4	3	N	5	3
„ 21,.....	...	...	4	NNE	5	4	N	4	3	N	5	3
„ 22,.....	...	...	3	NNE	5	3	ENE	3	3	E	4	3
„ 23,.....	...	...	4	E	3	4	E	4	4	E	4	3
„ 24,.....	...	...	4	E	3	4	E	5	5	E	5	5
„ 25,.....	...	...	6	E	5	6	E	5	6	E	5	6
„ 26,.....	...	...	5	E	5	5	E	4	5	E	5	5
„ 27,.....	...	...	5	E	4	5	E	4	4	E	5	4
„ 28,.....	...	...	4	E	5	4	E	4	4	E	4	4
„ 29,.....	...	...	3	E	3	3	E	2	2	E	2	1
„ 30,.....	...	...	0	N	3	0	E	4	4	E	5	5
„ 31,.....	...	...	4	E	4	4	E	3	3	SE	2	3
Mean,.....	...	...	4.1	E 10° N	4.0	4.1	E 5° N	3.8	3.9	E 6° N	4.0	3.9

TABLE X.

AMOUNT AND CLASSIFICATION OF CLOUDS AND DIRECTION WHENCE COMING.

Date.	4 a.			10 a.			4 p.			10 p.		
	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction	Amount.	Name.	Direction
1884.												
Oct. 1, ...	6	cum-nim.	E	10	c-cum. / cum-nim.	E	10	nim.	E	10	cum-nim.	ESE
„ 2, ...	10	cum-nim.	ESE	10	str. / cum-nim.	WSW / SE	10	nim.	...	10	nim.	SSE
„ 3, ...	1	cum.	...	8	c-cum. / cum.	W / SE	10	c-cum. / cum-nim.	NW / SE	7	c-cum. / cum.	W / SE
„ 4, ...	2	cum.	E	4	c-cum. / cum.	ESE / ESE	5	c-cum. / R-cum.	E / SE	2	cum.	ESE
„ 5, ...	3	sm-cum.	E	2	cum.	ESE	2	cum.	ESE	0	...	...
„ 6, ...	0	...	...	1	cum.	E	1	cum.	ESE	1	c.	ENE
„ 7, ...	1	cum.	E	3	cum.	ESE	2	c-cum. / cum.	E	4	cum.	E
„ 8, ...	6	cum.	E	6	cum.	E	3	cum.	E	2	cum.	E
„ 9, ...	3	cum.	E	1	cum.	E	1	c-cum. / cum.	E / E	8	cum.	ENE
„ 10, ...	9	cum.	ENE	4	c-cum. / cum.	E / E	4	c-str. / cum.	WNW / E	2	cum.	E
„ 11, ...	1	cum.	ENE	2	c-str. / cum.	WNW / E	2	c-str.	WNW	1	cum.	E
„ 12, ...	1	sm-cum.	E	2	cum.	E	1	sm-cum.	E	1	cum.	E
„ 13, ...	3	cum.	E	1	cum.	E	0	...	...	0	...	...
„ 14, ...	2	cum.	E	7	c-cum. / cum.	NNW / NE	9	nim.	N	8	cum-nim.	NNE
„ 15, ...	7	cum-nim.	N	3	c-cum. / cum.	N / E	10	cum.	E	10	R-cum.	ENE
„ 16, ...	3	sm-cum.	N	2	sm-cum.	E	8	sm-cum.	E	10	str.	...
„ 17, ...	6	cum-str.	ENE	2	c-cum. / cum.	W / ENE	9	c-cum. / R-cum.	W / E	10	nim.	E
„ 18, ...	2	cum-str.	SE	9	c-str. / cum.	W / ENE	4	c-str. / cum.	W / ENE	10	c-str. / cum-nim.	E
„ 19, ...	4	cum.	E	7	R-cum.	E	3	c-cum. / cum.	W / E	0	...	...
„ 20, ...	0	...	...	0	...	...	1	sm-cum.	W	0	...	...
„ 21, ...	0	...	...	0	...	...	0	...	...	0	...	...
„ 22, ...	0	...	...	0	...	...	0	...	...	0	...	...
„ 23, ...	0	...	...	0	...	...	0	...	...	0	...	...
„ 24, ...	0	...	...	0	...	...	0	...	...	1	cum.	E
„ 25, ...	3	cum.	E	3	cum.	E	1	cum.	E	0	...	...
„ 26, ...	0	...	...	2	c-cum.	WNW	2	c-str.	...	2	cum.	E
„ 27, ...	0	...	...	0	...	...	0	...	...	3	cum.	E
„ 28, ...	10	cum.	E	10	cum-nim.	E	10	cum-nim.	ESE	10	cum-nim.	ESE
„ 29, ...	10	cum-nim.	...	9	cum. / cum-nim.	S / E	8	sm-cum. / cum-nim.	WNW / E	0	...	...
„ 30, ...	0	...	...	8	sm-cum.	WNW	10	cum-nim.	E	10	cum-nim.	E
„ 31, ...	10	...	...	9	R-cum.	E	1	cum.	E	1	c-cum.	N
Mean, ...	3.3	...	E	4.0	...	E	4.1	...	E	4.0	...	E

TABLE XI.

VICTORIA PEAK.

Date.	Barometer.			Temperature.						
	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.	Sum.	Max.	Min.	Rad.
1884.	ins.	ins.	ins.	°	°	°	°	°	°	°
1,.....	28.094	28.041	28.040	71.0	70.0	69.8	86.0	71.3	68.0	68.5
2,.....	28.095	28.072	28.054	71.8	70.8	70.2	97.0	71.9	67.0	67.7
3,.....	28.178	28.146	28.189	73.6	73.2	72.6	127.0	74.9	67.2	67.5
4,.....	28.208	28.154	28.124	74.4	73.8	70.8	141.0	75.9	70.0	69.9
5,.....	28.176	28.116	28.125	74.8	73.8	72.2	133.0	75.1	70.0	69.9
6,.....	28.147	28.076	28.126	75.0	73.8	73.6	137.0	77.3	71.0	68.7
7,.....	28.147	28.094	28.139	75.0	73.8	72.8	141.0	75.9	71.0	69.5
8,.....	28.179	28.100	28.138	72.6	73.4	72.8	138.8	75.3	71.0	70.5
9,.....	28.187	28.146	28.162	75.8	74.0	72.8	136.6	77.1	70.0	70.5
10,.....	28.190	28.148	28.185	73.4	73.2	73.0	136.2	76.7	71.0	68.5
11,.....	28.198	28.172	28.212	73.8	73.6	72.8	134.2	75.9	71.0	69.5
12,.....	28.220	28.166	28.202	74.6	73.4	73.0	133.2	75.9	71.0	70.1
13,.....	28.224	28.172	28.166	74.0	72.8	70.8	135.0	75.7	69.0	68.5
14,.....	28.215	28.172	28.141	75.2	72.0	68.4	140.0	75.3	66.0	66.5
15,.....	28.261	28.225	28.245	66.8	67.8	64.2	130.2	71.9	61.0	61.5
16,.....	28.290	28.226	28.257	67.0	67.8	66.2	136.8	69.7	61.0	58.7
17,.....	28.275	28.217	28.252	68.2	68.8	68.8	131.8	71.3	63.0	70.5
18,.....	28.304	28.252	28.320	69.8	70.8	69.8	134.0	73.3	66.0	67.5
19,.....	28.314	28.277	28.278	70.0	71.8	69.4	137.0	73.1	65.0	65.5
20,.....	28.228	28.183	28.196	69.8	71.8	64.8	130.0	72.9	61.0	56.5
21,.....	28.213	28.193	28.266	64.8	68.8	65.0	129.0	70.9	60.0	57.5
22,.....	28.314	28.271	28.284	66.8	68.8	65.0	131.0	69.9	59.0	58.5
23,.....	28.333	28.285	28.285	68.4	67.8	64.8	125.0	68.5	59.0	54.5
24,.....	28.335	28.273	28.268	67.8	68.2	66.2	129.0	68.9	60.0	59.5
25,.....	28.290	28.237	28.263	65.8	66.8	64.8	129.6	66.9	64.2	60.5
26,.....	28.269	28.190	28.170	66.0	65.8	66.8	130.0	70.9	61.0	60.5
27,.....	28.201	28.124	28.172	67.8	66.8	66.8	129.0	69.9	64.0	63.5
28,.....	28.188	28.149	28.185	66.8	68.8	68.8	132.0	69.9	66.0	65.5
29,.....	28.210	28.177	28.167	70.8	71.0	70.0	135.0	71.9	68.0	68.5
30,.....	28.238	28.169	28.176	73.6	72.6	70.8	142.0	74.9	68.0	68.5
31,.....	28.198	28.166	28.150	69.8	72.8	69.8	129.0	72.9	67.0	64.5
Mean,.....	28.223	28.174	28.192	70.8	70.9	69.3	130.8	73.0	66.0	65.4

TABLE XII.

TEMPERATURE.

Date.	Cape d'Aguilar.					
	4 a.	10 a.	4 p.	10 p.	Max.	Min.
1884.	°	°	°	°	°	°
1,.....	78.5	79.0	77.6	78.6	79.8	73.6
2,.....	76.6	79.9	76.6	77.6	80.7	75.1
3,.....	78.6	83.6	80.8	79.6	84.2	77.8
4,.....	78.1	83.8	81.6	78.6	85.8	78.1
5,.....	77.9	81.8	84.6	77.6	85.8	77.6
6,.....	76.6	84.6	83.8	78.4	86.3	76.6
7,.....	77.0	81.6	79.6	79.4	82.8	77.0
8,.....	77.6	80.6	80.3	79.5	81.9	76.6
9,.....	78.7	80.6	81.3	80.1	81.8	78.7
10,.....	78.7	81.3	81.4	80.3	81.8	78.7
11,.....	79.6	79.7	79.8	79.6	81.8	79.6
12,.....	78.6	81.0	80.8	79.6	81.8	78.6
13,.....	78.6	80.0	79.6	78.6	81.0	78.6
14,.....	78.0	81.6	74.6	68.6	82.8	68.6
15,.....	69.8	75.6	74.9	71.6	75.8	69.4
16,.....	68.6	75.6	74.6	71.6	76.8	67.6
17,.....	71.6	71.8	71.6	77.1	77.1	68.8
18,.....	75.6	77.1	77.1	76.6	77.8	75.6
19,.....	75.6	77.6	76.6	74.9	78.8	74.6
20,.....	71.6	79.6	80.6	71.6	83.8	70.6
21,.....	67.6	74.6	75.6	72.6	78.8	67.6
22,.....	70.1	75.8	75.6	73.6	76.8	69.1
23,.....	70.8	74.2	74.6	73.6	77.8	69.6
24,.....	71.6	74.6	75.6	74.8	77.8	70.1
25,.....	74.6	73.1	73.0	72.8	76.3	71.6
26,.....	71.6	73.1	72.1	73.0	74.1	71.6
27,.....	72.6	73.6	74.6	74.8	75.2	72.1
28,.....	72.3	72.1	73.6	75.6	76.8	71.6
29,.....	71.0	77.1	79.8	75.1	82.8	71.0
30,.....	74.6	84.8	77.1	75.7	84.8	74.6
31,.....	75.6	76.9	77.1	74.6	77.8	74.6
Mean,.....	74.8	78.3	77.6	76.0	80.2	73.7

TABLE XIII.
RELATIVE HUMIDITY.

Date.	Observatory.			Cape d'Aguilar.				Victoria Peak	
	10 a.	4 p.	10 p.	4 a.	10 a.	4 p.	10 p.	10 a.	4 p.
1884.									
Oct. 1,.....	77	85	85	84	86	97	89	98	95
„ 2,.....	80	83	89	97	85	88	97	95	95
„ 3,.....	83	82	87	97	85	88	89	95	93
„ 4,.....	83	77	87	95	80	83	93	90	90
„ 5,.....	82	74	89	92	80	77	93	95	95
„ 6,.....	76	72	88	93	77	74	92	89	94
„ 7,.....	75	74	87	87	81	93	89	88	90
„ 8,.....	76	74	87	93	84	86	90	95	92
„ 9,.....	70	71	82	89	80	82	86	82	85
„ 10,.....	67	74	80	88	78	85	86	89	89
„ 11,.....	69	68	81	85	79	81	89	86	81
„ 12,.....	73	71	81	89	80	80	89	87	83
„ 13,.....	73	72	84	93	82	85	89	89	90
„ 14,.....	74	82	81	93	77	100	79	88	94
„ 15,.....	61	60	62	76	66	67	73	77	76
„ 16,.....	61	61	79	63	62	66	83	72	75
„ 17,.....	65	64	86	84	81	83	77	81	75
„ 18,.....	71	66	80	75	77	77	84	88	82
„ 19,.....	74	61	64	77	75	79	77	90	82
„ 20,.....	57	55	57	69	60	58	69	67	63
„ 21,.....	39	36	39	72	54	52	56	58	51
„ 22,.....	32	28	68	61	49	46	57	44	46
„ 23,.....	60	54	72	76	71	66	70	72	66
„ 24,.....	55	57	70	88	61	62	73	70	69
„ 25,.....	68	64	69	84	79	81	77	84	79
„ 26,.....	58	60	73	83	72	67	72	73	74
„ 27,.....	66	65	79	85	79	79	87	80	78
„ 28,.....	81	76	85	89	90	95	93	99	90
„ 29,.....	75	78	89	95	91	83	95	95	95
„ 30,.....	73	79	84	97	71	91	92	86	90
„ 31,.....	74	75	87	86	84	82	88	95	90
Mean,.....	69	68	78	85	76	78	83	84	82

TABLE XIV.
TENSION OF AQUEOUS VAPOUR EXPRESSED IN INCHES OF MERCURY.

Date.	Observatory.			Victoria Peak.		
	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.
1884.						
Oct. 1,.....	0.796	0.817	0.825	0.749	0.695	0.69
„ 2,.....	0.817	0.832	0.892	0.746	0.721	0.72
„ 3,.....	0.905	0.906	0.867	0.786	0.759	0.76
„ 4,.....	0.903	0.871	0.857	0.775	0.759	0.74
„ 5,.....	0.896	0.887	0.861	0.819	0.792	0.79
„ 6,.....	0.810	0.869	0.849	0.777	0.783	0.78
„ 7,.....	0.839	0.873	0.864	0.768	0.752	0.76
„ 8,.....	0.822	0.870	0.868	0.767	0.756	0.76
„ 9,.....	0.778	0.824	0.850	0.727	0.711	0.69
„ 10,.....	0.763	0.871	0.839	0.735	0.729	0.70
„ 11,.....	0.745	0.792	0.842	0.714	0.678	0.72
„ 12,.....	0.790	0.828	0.833	0.749	0.680	0.74
„ 13,.....	0.786	0.828	0.828	0.750	0.726	0.67
„ 14,.....	0.857	0.751	0.504	0.774	0.736	0.63
„ 15,.....	0.498	0.519	0.498	0.507	0.520	0.45
„ 16,.....	0.508	0.577	0.629	0.479	0.508	0.56
„ 17,.....	0.577	0.637	0.733	0.561	0.528	0.55
„ 18,.....	0.675	0.691	0.743	0.646	0.619	0.66
„ 19,.....	0.728	0.621	0.579	0.664	0.642	0.56
„ 20,.....	0.514	0.552	0.430	0.483	0.491	0.39
„ 21,.....	0.314	0.336	0.310	0.327	0.365	0.35
„ 22,.....	0.265	0.265	0.511	0.291	0.328	0.47
„ 23,.....	0.513	0.511	0.542	0.499	0.445	0.45
„ 24,.....	0.476	0.530	0.597	0.475	0.477	0.49
„ 25,.....	0.561	0.564	0.564	0.533	0.520	0.54
„ 26,.....	0.481	0.536	0.591	0.467	0.469	0.49
„ 27,.....	0.563	0.597	0.673	0.541	0.514	0.56
„ 28,.....	0.710	0.707	0.759	0.655	0.630	0.67
„ 29,.....	0.772	0.825	0.810	0.714	0.726	0.72
„ 30,.....	0.773	0.794	0.781	0.716	0.729	0.71
„ 31,.....	0.736	0.752	0.749	0.690	0.727	0.69
Mean,.....	0.683	0.705	0.712	0.641	0.629	0.63

TABLE XV.

RAINFALL AT DIFFERENT STATIONS.

Date.	Observatory.		Stone-Cutters' Island.	Victoria Peak.
	Amount.	Duration.	Amount.	Amount.
1884.	ins.	hrs.	ins.	ins.
1,.....	1.960	8	1.41	1.45
2,.....	0.475	6	0.33	0.54
3,.....	0.035	1	0.40	...
4,.....	...	0	...	...
5,.....	...	0	...	...
6,.....	...	0	...	...
7,.....	0.150	2	0.60	0.31
8,.....	...	0	...	...
9,.....	...	0	0.10	0.12
10,.....	0.040	1	...	...
11,.....	...	0	...	...
12,.....	...	0	...	...
13,.....	...	0	...	...
14,.....	0.200	3	0.70	0.20
15,.....	...	0	...	...
16,.....	0.040	1	0.20	...
17,.....	0.110	2	...	...
18,.....	...	0	...	...
19,.....	...	0	...	...
20,.....	...	0	...	...
21,.....	...	0	...	...
22,.....	...	0	...	...
23,.....	...	0	...	...
24,.....	...	0	...	...
25,.....	...	0	...	...
26,.....	...	0	...	...
27,.....	0.075	2	0.40	...
28,.....	...	0	...	...
29,.....	...	0	...	...
30,.....	...	0	...	...
31,.....	...	0	...	...
Total,.....	3.085	26	4.14	2.62

W. Doberck,
Government Astronomer.

Hongkong Observatory, 17th June, 1885.

HONGKONG OBSERVATORY.

Weather Report for November, 1884.

In the *China Coast Meteorological Register*, based on information transmitted by the Great Northern and the Eastern Extension Telegraph Companies—which I have published daily, is given a summary of the atmospheric circumstances in Manila and along the Coast of China between Hongkong and Shanghai. It also contains information concerning the weather in Nagasaki and Wladivostock, and the first appearance and progress of Typhoons.

In the beginning of November moderate NE winds blew over the China Sea. The barometer was rising and fine weather prevailed. In Manila, the barometer reached a maximum 30.03 at 10 a. on the 12th. The weather was hot but fine and dry over Luzon, and only light airs were reported. At 4 p. a gentle N breeze was reported from Bolinao. At 10 a. on the 13th, the barometer had fallen to 29.97 in Manila, where it was overcast and showery with a light air from NW. From the log of the S.S. *Woosung*, passing through the Mindoro Sea bound for Hongkong, it became subsequently known, that a typhoon (Typhoon XVII) was at the time passing Westward in a latitude of about 11° North. This steamer had on the previous day experienced moderate N winds and a smooth sea, but thunderstorms accompanied with heavy rain. During the night the sky was overcast, and on the morning of the 13th a NW wind increasing in force was noted. It backed and reached SW at 1.30 p., when it blew a whole gale with a confused sea and heavy rain. At the same time the barometer fell to 29.52, the lowest reading reported. It appears, that the steamer must have been within 30 miles of the centre, whose position at 10 a. was about 11° N, 123° E. The barometer rose then and reached 29 85 at 8 p., when the wind had calmed down to a fresh SSE breeze, but the weather continued showery. Strong NE breezes with squalls of wind and rain, a rising sea and a windy appearance of the sky are reported by ships west of the centre in the China Sea, as far as the shore of Cochin-China, and between 7° and 16° N latitude. Moderate E and NE breezes with fine weather, but a rather high sea prevailed over the northern part of the China Sea. The area of strong wind was rather limited at the time.

At 10 a. on the 14th, the centre appears to have been about 12½° N, 116° ½ E. The S.S. *Danube*, which was within 40 or 50 miles to the NNE of the centre, at midnight encountered the full force of the typhoon. The barometer went down to 29.63. The sea was something frightful and the rain fell in torrents. The temperature was 81°. By this time the typhoon appears to have attained its greatest violence, and also greater dimensions. At about 10 a. on the 15th, it appears to have been about 15° N, 109½° E, and to have struck the coast of Cochin-China near Cape Batangan.

In northern Luzon gentle E breezes blew on the 15th and the 16th, at 4 p. on which day however a gentle NNE breeze was reported from Bolinao. The sky was blue. At 10 a. on the 16th, the barometer reached a maximum 30.01 in Manila, and also in southern Formosa, where NE breezes had blown steadily since the beginning of the month. At 10 a. on the 17th, the barometer had fallen to 29 95 in Manila. The air was misty over Luzon and southern Formosa. At that time Typhoon XVIII was ESE of Manila in 14° N, 125° E or thereabout. The barometer continued falling. In Bolinao a gentle NW breeze, reported in the morning, increased steadily and it blew a strong NNW breeze with detached clouds in the early morning hours on the 18th. At 10 a. on the 18th, it blew a fresh N gale in Bolinao, and a fresh WNW gale in Manila, where the barometer had fallen to 29.44, and the temperature had fallen several degrees. The centre of the typhoon appears to have been in 15° 30′ N, 121° 33′ E. At S. Cape, the air was misty, the sky densely overcast, and the NE breeze freshened in the course of the day. Next day a fresh NE gale was registered.

I wrote in the *China Coast Meteorological Register*: 'The barometer has fallen. A violent typhoon is East of Bolinao moving Westward. Overcast and hazy weather with light winds prevails.' At 1h 40m p. on the 18th the Drum was hoisted, and at 12h 30m p. on the following day, it was replaced by the South Cone. During the day a moderate NNE gale blew at Bolinao, where the sky became overcast, with drizzling rain in the evening. A strong S breeze was reported from Manila at 4 p. The barometer had then risen to 29.61, but continued falling in Bolinao. Between 1h 30m a. and 4 a. on the 19th, the wind is described as 'terrific' by the Superintendent of the Telegraph Office in Bolinao. At 5 a. the barometer had fallen to 29.43 with a fresh E gale. The weather continued overcast, wet and squally. Considerable damage to life and property attended the passage of this typhoon across Luzon.

At 10 a. on the 19th, the centre was in 15° 49′ N, 118° 40′ E. A moderate ESE gale was reported from Bolinao. A fresh NE gale blew at S. Cape (Formosa), where the sky was overcast. Moderate E and NE breezes blew along the Coast of China, and c-cum from S were observed in Hong kong. Strong NW breezes or moderate gales are reported by ships W and SW of the typhoon.

At 10 a. on the 20th, the centre was in 15° 45′ N, 116° 16′ E, and at 10 a. on the 21st it 14° 52′ N, 114° 10′ E. On the latter day it blew a strong gale 250 miles NE of the centre, and a whole gale 350 miles SW of the centre. Rain fell in squalls 300 miles NW of the centre. It rained continuously within 100 miles of the centre, and the rain fell in torrents within 50 miles. Within about 60 miles at the centre the wind blew with typhoon force, and within 10 miles the air was calm. The S.S. *Benarty*, which was in the central calm at 6 a. on the 20th reports, that many small birds dropped on deck, but makes no mention of the sky clearing at the time. The sea was mountainous and confused. This steamer lost its funnel and sustained other great damage.

The isobars appear, as far as can be judged from the observations, to have been elliptical, the major axes being situated in about the line of progression of the centre. In front the wind made an angle with the gradients of 62° in the right hand quadrant, and 52° in the left hand quadrant, or on an average 57°. In rear the wind made an angle of 29° in the right hand quadrant, and probably about the same in the left hand quadrant, but here no ships' logs are available. These results are derived from the observations within 250 miles of the centre. Within 100 miles of the centre in the rear, the angle appears to have had a value more nearly equal to the angle in front.—This result, derived principally from observations made on the open sea, agrees well with the theory. The typhoon was propelled by the NE winds, and proceeded at a very constant rate, keeping the high pressures on its right. The angle on the left side was smaller owing to the lower latitude. The different results obtained in case of typhoons near the coast of China may be explained from the effects of friction near the surface of the earth. If sufficient observations of clouds were available in such cases, they would no doubt throw additional light on the subject.

The data available do not suffice for determining the proportion between the force of the wind and the gradients, but the following figures are approximately correct: It blew a moderate gale (7), when the gradient was 0.02 inches in 15 miles, a fresh gale (8), when the gradient was 0.03, a strong gale (9), when the gradient was 0.04, a whole gale (10), when the gradient was 0.05, a storm (11), when the gradient was 0.06 and with full typhoon force (12), when the gradient exceeded the latter figure. The average temperature in Bolinao, when the typhoon was passing, was nearly 80°. At sea it appears to have been about 72°.

At 10 a. on the 22nd, the centre appears to have been in 13° 15′ N, 112° 34′ E, and at 10 a. on the 23rd in 11° 25′ N, 111° 24′ E. It cannot be traced further than this, but I am informed, that great loss was sustained by steamers carrying bullocks, by high seas in the entrance to the Gulf of Siam —Strong NE winds and rather high seas obtained during the remainder of the month in the China Sea.

The Barograph and the Standard Barometer at the Observatory are placed at 110 feet above Mean Sea Level. The bulbs of the Thermograph Thermometers are 111 feet above Mean Sea Level and 6 feet above the ground. They are exposed in an unpainted and double-louvered zinc screen fixed to the north wall of the main building in a shaded position. The Solar Radiation Maximum Thermometer is 109 feet above Mean Sea Level and 4 feet above the ground, and the Terrestrial Radiation Minimum Thermometer is about one inch above the ground. The self-recording Rain-gauge is placed 106 feet above Mean Sea Level, and the rim, which is 11¼ inches in diameter, is 21 inches above the ground. The cups of the Anemograph are 45 feet above the ground, and 150 feet above Mean Sea Level.

At Victoria Peak the Instruments, except the Radiation Thermometers, are placed in the Look-out. The Barometer is 1821 feet above Sea Level. The bulbs of the Thermometers are about 4 feet above the floor, except the Maximum Thermometer, which is a few inches higher. The Radiation Thermometers are placed at the same height above the ground as at the Observatory. At Cape d'Aguilar the Thermometers are placed about 170 feet above Sea Level (according to the *Government Gazette*) in a wooden screen 2 feet above the ground, except the Maximum Thermometer, which is a few inches higher.

Table I exhibits the hourly readings of the Barometer reduced to 32° .0 Fahrenheit, but not to Sea Level, as measured (at two minutes to the hour named) from the Barograms. The Mean Height of the Barometer was 29.996, the Highest was 30.205 at 9 a. on the 26th, and the Lowest was 29.800 at 4 p. on the 4th. The Barometric Tide amounted to 0.097.

Table II exhibits the hourly readings of the Temperature (Dry Bulb Thermometer) as measured from the Thermograms (at two minutes past the hour named), and also the Extreme Temperatures during the day. The Mean Temperature was 67.8, the Highest was 83.1 at about 3 p. on the 1st, and the Lowest was 51.3 at about 6 a. on the 23rd.

Table III exhibits the hourly readings of the Temperature of Evaporation (Damp Bulb Thermometer) as measured from the Thermograms (at two minutes past the hour named) and also the Solar Radiation Maximum (Black Bulb) and Terrestrial Radiation Minimum Temperatures.

Table IV exhibits the Mean Relative Humidity in percentage of saturation (the humidity of air saturated with moisture being 100) and Mean Tension of Aqueous Vapour present in the air expressed in inches of mercury, for every hour in the day and for every day in the month. The Mean Tension, which exhibits a daily variation, was 0.490. The Mean Relative Humidity, which also exhibits a daily variation, was 67.

Table V exhibits the Duration of Sun-shine as registered by aid of the Sun-shine Recorder from half an hour before to half an hour after the hour named. The Sun shone 177.1 hours during the month.

Table VI exhibits the amount of Rain registered from half an hour before to half an hour after the hour named. The Total Rain-fall during the month was 1.495 inches. It rained during 33 hours. The greatest Hourly Rain-fall was 0.240 at 1 p. on the 3rd.

Table VII exhibits, for every hour in the day, the Velocity of the Wind and its Direction in numbers (8=E. 16=S. 24=W. 32=N) as measured from the Anemograms. The Velocity is the number of miles traversed by the Wind, from half an hour before to half an hour after the hour named. The Direction is read off at the hour except when the Wind is very light and changeable, when the average Direction during the hour is estimated, taking into account the Velocity from different quarters. The Direction is not noted when the Velocity is below 1.5 miles an hour.

The Mean Velocity was 15.8 miles an hour. It was greatest during the middle of the day. The greatest Velocity, 49 miles, occurred at 2 a. on the 22nd.

The Total Distance travelled by, as well as the Duration and average Velocity of Winds from different quarters were as follows:—

Direction.	*Total Distance.* Miles.	*Duration.* Hours.	*Velocity.* Miles per hour.
N	3290	208	15 8
NE	1601	121	13.2
E	6063	321	18.9
SE	230	27	8.5
S	33	8	4 1
SW	7	2	3 5
W	66	14	4.7
NW	61	7	8.7
Calm	8	12	0.7

Table VIII exhibits, for every hour in the day, the Velocity of the Wind reduced to 4 and also to 2 Directions, as well as the Mean Direction of the Wind, which exhibits a small daily variation.

Table IX exhibits the Direction (to two points) and Force of the Wind (0-12) at Victoria Peak. The Average Force of the Wind was 4.2 corresponding to 24 miles an hour. The Sea Disturbance (0-9) exhibited in the same table has been derived from observations made at Cape d'Aguilar.

Table X exhibits the Amount (0-10), Name and Direction, whence coming, of the Clouds. When the names of Upper and Lower Clouds are given, but only one Direction, this refers to the Lower Clouds. The Mean Direction of the Lower Clouds was E. On an average 52 per cent of the sky was clouded.

Table XI and XII exhibit the readings of the Barometer reduced to 32.0 Fahrenheit but not to Sea Level, at Victoria Peak, and the Thermometers at Victoria Peak and at Cape d'Aguilar.

The Mean Height of the Barometer at the Peak was 28.228. The Mean Temperature was 60.8 at the Peak and 68.1 at Cape d'Aguilar. The Highest was 73.7 on the 5th at the Peak and 83.8 on the 1st at Cape d'Aguilar, and the Lowest was 44.0 on the 22nd at the Peak, and 52.1 on the 22nd and 23rd at Cape d'Aguilar.

The Mean Temperature in Hongkong decreased one degree Fahrenheit for every 241 feet ascended.

Table XIII exhibits the Relative Humidity as determined from observations of the Dry and Damp Thermometers. The Mean Relative Humidity at the Observatory was 67, at Cape d'Aguilar 76, and at Victoria Peak 80. The Least Relative Humidity registered was 20 at 4 p. on the 22nd at the Observatory, 37 at 4 a. on the 25rd, at Cape d'Aguilar, and 33 at 10 p. on the 21st at Victoria Peak.

Table XIV exhibits the Tension of Aqueous Vapour at the Observatory and at the Peak. The Mean Tension was 0.490 at the Observatory, and 0.457 at the Peak. The Greatest Tension registered was 0.807 at 4 p. on the 5th, at the Observatory, and 0.724 at 10 a. on the 5th at the Peak. The Least Tension was 0.100 at 4 p. on the 22nd at the Observatory, and 0.112 at 10 p on the 21st at the Peak.

Table XV exhibits the amount of Rain measured at 10 a. on the following day, and the duration of Precipitation at the Observatory. The greatest amount fell on the 3rd when it rained 0.800 at the Observatory, 0.56 at Cape d'Aguilar, and 0.64 at the Peak.

Unusual visibility was noticed on the 6th, the 7th, the 8th, the 9th, the 13th and the 19th

Dew fell on the evening of the 5th, the 25th, the 27th, the 29th, and the 30th.

TABLE I.

BAROMETRIC PRESSURE FOR THE MONTH OF NOVEMBER, 1884.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 h.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means.
Nov. 1, ...	29.846	29.838	29.830	29.830	29.840	29.858	29.892	29.908	29.913	29.901	29.891	29.874	29.848	29.824	29.813	29.811	29.811	29.820	29.840	29.854	29.850	29.866	29.861	29.859	29.853
„ 2, ...	.855	.849	.844	.845	.847	.871	.886	.904	.926	.943	.941	.919	.898	.882	.872	.875	.876	.878	.893	.907	.909	.916	.918	.916	29.890
„ 3, ...	.910	.898	.880	.862	.855	.868	.882	.909	.934	.942	.926	.911	.889	.865	.849	.843	.839	.845	.846	.862	.869	.869	.871	.861	29.879
„ 4, ...	.851	.834	.811	.808	.813	.827	.846	.864	.880	.888	.876	.851	.827	.806	.801	.800	.805	.823	.838	.861	.863	.874	.876	.868	29.841
„ 5,	.858	.851	.851	.848	.857	.868	.889	.906	.917	.915	.898	.881	.859	.843	.832	.842	.847	.856	.869	.886	.889	.887	.887	.887	29.872
„ 6, ...	.885	.888	.887	.887	.890	.912	.929	.952	.959	.961	.941	.925	.896	.885	.873	.872	.872	.884	.897	.908	.908	.909	.910	.897	29.905
„ 7, ...	.885	.877	.869	.870	.881	.905	.924	.939	.935	29.947	.929	.914	.888	.876	.872	.873	.885	.891	.911	.930	.938	.938	.937	.935	29.907
„ 8. ...	29.927	29.924	29.919	29.919	29.931	29.955	29.972	29.983	29.998	30.000	29.973	29.966	29.924	29.905	29.880	29.896	29.913	29.919	29.938	29.957	29.958	29.956	29.956	29.956	29.943
„ 9, ...	29.952	29.938	29.932	29.931	29.930	29.958	29.979	29.985	30.000	29.996	29.980	29.962	29.923	29.917	29.917	29.928	29.942	29.970	29.985	30.008	30.019	30.024	30.031	30.035	29.969
„ 10, ...	30.034	30.033	30.029	30.029	30.038	30.063	30.079	30.104	30.114	30.123	30.111	30.084	30.062	30.048	30.041	30.043	30.049	30.065	30.078	30.097	30.104	30.099	30.095	30.091	30.071
„ 11, ...	30.079	30.067	30.058	30.052	30.038	30.059	30.073	30.079	30.086	30.088	30.073	30.052	30.028	30.005	29.999	29.995	29.998	30.006	30.017	30.040	30.042	30.035	30.027	30.017	30.042
„ 12, ...	30.010	30.006	29.999	29.999	30.000	30.020	30.038	30.065	30.068	30.065	30.049	30.031	29.994	29.974	29.962	29.968	29.974	29.984	30.002	30.017	30.029	30.031	30.025	30.021	30.014
„ 13, ...	30.013	29.998	29.989	29.989	29.998	30.018	30.039	30.056	30.077	30.072	30.042	30.018	29.992	29.982	29.975	29.975	29.988	30.002	30.016	30.038	30.043	30.045	30.042	30.029	30.018
„ 14, ...	30.015	29.999	30.006	30.006	30.032	30.053	30.076	30.093	30.100	30.087	30.079	30.058	30.026	30.017	29.999	29.996	30.010	30.024	30.051	30.071	30.076	30.075	30.057	30.038	30.039
„ 15, ...	30.016	29.995	29.993	29.995	30.000	30.015	30.026	30.050	30.049	30.053	30.037	29.995	29.947	29.927	29.910	29.917	29.930	29.945	29.964	29.999	30.012	30.009	30.003	29.987	29.991
„ 16, ...	29.973	29.961	29.940	29.941	29.947	29.943	29.960	29.974	29.988	29.984	29.959	29.944	29.921	29.909	29.907	29.907	29.908	29.919	29.934	29.942	29.942	29.941	29.948	29.941	29.943
„ 17, ...	29.923	29.915	29.900	29.892	29.897	29.910	29.923	29.930	29.945	29.945	29.934	29.918	29.878	29.874	29.868	29.850	29.857	29.872	29.874	29.885	29.906	29.910	29.910	29.891	29.900
„ 18, ...	29.855	29.865	29.851	29.842	29.838	29.861	29.878	29.893	29.906	29.923	29.913	29.893	29.860	29.837	29.837	29.845	29.860	29.866	29.883	29.896	29.908	29.923	29.921	29.920	29.879
„ 19, ...	29.913	29.903	29.904	29.916	29.922	29.949	29.9 9	29.989	29.988	29.983	29.970	29.932	29.902	29.872	29.854	29.863	29.887	29.903	29.924	29.927	29.928	29.927	29.930	29.927	29.924
„ 20, ...	29.928	29.926	29.921	29.923	29.932	29.943	29.958	29.979	29.988	29.983	29.956	29.932	29.902	29.887	29.882	29.889	29.907	29.933	29.950	29.971	29.982	29.987	29.982	29.997	29.948
„ 21, ...	29.999	29.993	29.999	30.005	30.022	30.039	30.058	30.084	30.098	30.095	30.084	30.061	30.031	30.013	30.004	30.018	30.040	30.059	30.086	30.104	30.113	30.125	30.140	30.110	30.057
„ 22, ...	30.111	30.110	30.108	30.124	30.136	30.141	30.143	30.168	30.182	30.181	30.164	30.136	30.100	30.080	30.074	30.074	30.092	30.103	30.124	30.141	30.144	30.153	30.143	30.141	30.128
„ 23, ...	.138	.125	.122	.122	.125	.135	.152	.167	.175	.171	.157	.126	.084	.061	.053	.052	.069	.077	.097	.112	.110	.113	.108	.094	30.114
„ 24, ...	.093	.076	.071	.063	.057	.073	.102	.118	.131	.127	.099	.070	.038	.018	.018	.024	.043	.055	.071	.087	.097	.106	.105	.094	30.076
„ 25, ...	.087	.076	.062	.063	.070	.097	.113 *	.135 *	.154	.158	.145	.117	.091	.081	.071	.071	.087	.104	.121	.128	.129	.138	.142	.144	30.108
„ 26, ...	.155	.151	.144	.143	.153	.175	.195	.193	.205	.198	.166	.119	.093	.075	.070	.066	.086	.110	.127	.160	.162	.162	.162	.161	30.143
„ 27, ...	.158	.149	.142	.136	.131	.142	.157	.175	.183	.175	.160	.136	.092	.077	.073	.072	.085	.098	.116	.134	.146	.155	.143	.134	30.132
„ 28, ...	.139	.138	.131	.128	.114	.119	.137	.165	.184	.181	.170	.143	.105	.088	.073	.069	.076	.092	.109	.130	.144	.145	.140	.128	30.127
„ 29, ...	.115	.097	.085	.082	.076	.087	.106	.120	.146	.149	.132	.091	.048	.034	.024	.025	.032	.049	.067	.086	.097	.105	.091	.079	30.084
„ 30, ...	.073	.060	.054	.054	.055	.065	.077	.094	.118	.119	.096	.082	.055	.040	.028	.028	.040	.055	.065	.088	.102	.105	.099	.099	30.073
.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hourly Means, ...	29.994	29.985	29.978	29.977	29.981	29.998	30.015	30.033	30.045	30.045	30.028	30.005	29.974	29.957	29.948	29.949	29.960	29.974	29.990	30.008	30.014	30.018	30.015	30.009	29.996

* Interpolated.

TABLE II.

TEMPERATURE FOR THE MONTH OF NOVEMBER, 1884.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means.	Max.	Min.
Nov. 1,.....	73.6	73.6	73.2	73.2	73.2	73.4	73.9	75.5	77.1	80.9	81.4	81.5	81.1	80.9	83.0	81.7	80.7	78.1	77.7	77.0	77.0	76.8	76.8	76.3	77.4	83.1	73.1
„ 2,.....	76.1	76.0	76.6	75.8	76.0	76.1	76.3	76.7	76.5	75.0	74.0	74.7	76.1	76.0	75.9	75.8	75.2	75.2	75.2	75.5	75.5	75.3	75.2	72.9	75.6	77.4	72.9
„ 3,.....	73.0	73.0	73.6	74.1	73.9	73.7	73.9	74.4	74.0	73.7	74.0	73.4	73.1	74.0	74.7	74.5	74.0	73.7	74.5	73.1	73.3	73.9	74.2	73.8	73.8	74.7	72.8
„ 4,.....	73.9	74.2	73.9	74.0	72.6	73.1	73.7	75.0	76.6	77.8	77.8	79.7	80.2	79.0	79.7	78.9	77.2	76.1	75.7	75.5	75.0	75.0	74.9	74.8	76.0	80.6	72.6
„ 5,.....	74.9	74.8	74.8	74.5	74.3	74.0	74.7	75.9	77.0	78.0	79.4	79.9	80.0	79.8	79.6	79.0	77.3	76.1	75.8	75.3	74.7	74.1	74.0	73.7	76.3	80.1	73.7
„ 6,.....	73.5	73.5	73.3	73.0	72.8	72.8	73.6	74.9	76.8	77.8	78.9	79.3	79.2	78.8	78.2	77.2	76.1	75.7	75.6	76.0	74.2	73.9	74.0	74.1	75.5	80.0	72.7
„ 7,.....	73.9	73.5	73.5	73.1	73.2	73.1	73.6	73.9	74.9	76.0	75.9	76.7	76.4	76.8	77.1	76.3	75.1	74.7	74.9	74.9	74.9	74.8	74.7	74.0	74.8	77.3	73.0
„ 8,.....	73.9	73.7	73.5	72.9	72.4	72.1	72.1	72.6	73.2	73.9	74.8	75.1	77.1	76.5	76.8	75.8	74.7	73.8	73.8	73.9	73.7	73.7	73.7	74.1	74.1	77.2	71.5
„ 9,.....	74.1	73.9	74.0	73.7	73.8	73.7	74.0	75.3	77.0	78.0	77.6	77.1	78.1	78.0	77.1	76.1	74.6	72.9	72.0	70.7	69.9	69.9	69.1	69.0	74.1	79.6	69.0
„ 10,.....	68.5	67.9	67.5	67.2	66.6	66.2	65.6	65.9	67.5	67.1	66.1	65.5	64.8	64.1	64.5	63.7	63.6	63.4	63.3	63.6	63.9	63.8	63.8	64.1	65.3	68.9	63.3
„ 11,.....	64.0	64.0	64.1	64.2	63.8	64.0	64.8	65.7	67.1	68.3	69.8	70.9	70.8	70.9	71.6	71.0	70.4	69.9	71.1	70.5	70.6	70.7	70.4	70.8	68.3	72.0	63.8
„ 12,.....	70.6	69.6	68.5	68.6	68.7	68.8	69.0	70.8	72.6	74.1	75.9	76.8	78.4	77.0	77.0	76.4	74.8	74.1	73.8	74.1	73.8	73.9	73.6	73.8	73.1	78.5	68.2
„ 13,.....	73.6	73.3	73.2	72.9	73.0	72.4	72.7	73.9	75.2	76.7	77.4	78.7	80.2	80.1	79.5	79.0	77.2	75.2	74.1	73.3	72.9	73.3	72.6	72.7	75.1	80.4	72.4
„ 14,.....	72.6	73.0	73.1	72.0	70.6	70.0	69.7	70.8	72.0	72.3	71.9	71.8	72.0	69.9	68.7	68.4	67.7	66.5	65.7	65.6	66.1	66.0	65.6	66.1	69.5	73.5	65.5
„ 15,.....	64.9	64.8	64.5	64.1	64.0	63.5	63.7	64.5	68.1	69.8	71.1	71.8	71.7	72.5	71.3	71.2	70.9	70.7	70.4	69.9	69.0	68.7	69.7	70.8	68.4	72.5	63.5
„ 16,.....	71.0	71.2	71.1	70.7	70.8	71.1	71.6	72.2	72.7	74.5	75.0	74.7	73.1	71.5	71.8	71.3	71.4	71.7	71.4	72.1	72.6	72.8	72.5	72.1	72.1	75.2	70.7
„ 17,.....	71.9	71.7	71.7	71.6	71.6	71.6	71.1	71.8	72.9	74.3	75.7	76.0	75.2	74.7	72.8	72.7	72.1	71.9	72.2	72.5	72.7	72.6	72.6	72.7	72.8	76.5	71.1
„ 18,.....	71.7	71.9	71.8	71.9	71.8	71.7	71.9	72.9	73.6	70.8	66.8	65.7	66.8	67.2	66.4	65.3	64.7	64.7	64.4	64.0	63.2	62.3	61.4	61.5	67.7	73.9	61.2
„ 19,.....	60.0	59.6	59.1	58.4	58.1	57.4	57.0	57.9	59.6	61.4	63.4	64.3	66.3	66.6	67.4	66.7	65.4	64.1	63.6	62.9	63.2	63.4	62.1	61.7	62.1	67.6	56.8
„ 20,.....	61.3	60.7	60.5	59.8	59.4	58.5	59.7	62.3	63.9	65.9	67.1	69.0	70.1	71.0	71.2	70.9	70.0	69.1	68.2	66.9	64.6	62.7	61.9	62.1	64.9	71.8	58.5
„ 21,.....	62.0	61.7	60.8	60.1	59.5	58.7	58.5	58.9	60.5	60.4	61.3	62.9	65.1	66.6	65.3	64.0	63.1	62.6	61.7	60.1	58.8	57.8	56.3	55.7	60.9	66.6	55.7
„ 22,.....	55.7	55.2	55.0	53.7	52.9	52.3	52.3	52.7	54.0	55.0	57.2	57.9	59.5	59.9	60.6	59.9	59.1	57.6	57.1	56.8	56.2	55.8	55.1	54.4	56.1	60.8	52.0
„ 23,.....	53.3	52.8	51.9	51.8	51.7	51.5	52.3	53.6	55.8	57.8	60.0	61.5	61.7	61.4	61.9	61.0	60.2	59.5	59.0	58.8	58.5	57.5	57.0	56.5	57.0	62.7	51.3
„ 24,.....	56.1	54.7	54.7	53.3	53.8	53.7	54.1	55.4	57.3	59.2	60.8	62.1	63.3	64.8	65.2	63.4	62.4	61.0	60.9	61.0	59.9	60.2	58.6	57.9	58.9	65.8	53.3
„ 25,.....	57.9	57.2	56.3	56.0	55.8	55.0	55.3	56.6	58.4	60.2	61.6	63.2	64.4	65.2	64.0	64.2	62.7	59.7	59.0	58.2	57.2	56.9	56.6	56.3	59.1	65.2	54.9
„ 26,.....	56.8	57.1	56.6	55.8	56.0	55.8	54.9	57.7	58.0	60.3	61.6	62.2	64.3	65.8	66.3	65.3	63.6	62.1	61.8	61.8	61.9	61.8	61.1	59.8	60.3	66.7	54.9
„ 27,.....	59.0	58.6	58.3	57.2	56.5	56.1	55.3	56.6	58.5	60.1	61.8	62.8	64.9	65.3	64.5	64.0	62.2	60.1	59.3	58.9	58.1	57.8	57.2	56.9	59.6	65.3	55.3
„ 28,.....	56.7	57.3	56.9	56.6	56.4	56.1	56.5	57.6	57.9	60.9	62.2	63.3	64.3	64.3	64.1	63.3	62.0	60.5	60.0	60.1	59.8	60.3	59.8	59.9	59.9	64.7	55.9
„ 29,.....	59.9	59.2	58.9	58.5	58.1	57.4	58.2	59.3	60.3	62.1	63.7	65.0	65.9	66.4	65.4	64.4	62.8	61.2	60.4	60.1	59.3	59.7	60.1	60.7	61.1	66.5	57.2
„ 30,.....	60.8	60.7	61.1	61.0	60.8	60.0	60.9	62.4	65.0	64.8	65.9	66.9	67.4	67.6	67.3	66.3	64.8	63.0	62.2	61.6	60.8	60.4	61.3	60.7	63.1	67.8	59.8
.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hourly Means,.....	66.5	66.3	66.1	65.7	65.4	65.1	65.4	66.5	67.8	68.9	69.7	70.3	71.0	71.1	71.0	70.3	69.2	68.2	67.8	67.5	67.0	66.9	66.5	66.3	67.8	72.4	63.9

TABLE III.

TEMPERATURE OF EVAPORATION AND RADIATION, FOR THE MONTH OF NOVEMBER, 1884.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means.	Sun.	Rad.
Nov. 1,.....	71.6	71.7	71.2	71.6	71.6	71.5	71.6	72.8	72.3	74.8	74.6	74.6	74.0	73.9	75.7	74.6	74.8	73.7	73.1	73.3	72.9	73.0	73.1	73.0	73.1	147.8	67.4
„ 2,.....	73.7	72.8	72.8	73.2	72.9	72.9	73.2	73.6	72.9	73.2	72.4	72.2	72.7	72.8	72.6	72.6	72.0	71.8	71.8	71.7	71.4	71.7	71.6	71.6	72.5	100.8	71.6
„ 3,.....	70.9	71.0	71.1	71.1	71.1	71.0	71.2	71.5	72.0	72.1	71.9	72.1	72.0	72.0	72.2	71.9	71.9	71.9	72.2	72.2	72.2	72.6	72.6	72.5	71.8	94.7	70.4
„ 4,.....	72.3	72.6	72.1	72.0	71.2	71.8	72.1	72.4	73.1	73.4	74.2	75.0	75.3	75.0	75.0	74.1	73.4	72.9	73.0	73.0	73.0	73.1	73.1	73.0	73.2	137.7	70.6
„ 5,.....	73.1	73.1	72.8	72.4	72.5	72.0	72.4	73.0	73.8	73.8	74.9	75.1	75.2	75.0	75.1	74.8	74.1	73.7	73.6	73.3	73.0	72.7	72.3	72.0	73.5	137.3	70.1
„ 6,.....	71.7	71.6	71.3	71.2	71.0	70.9	70.9	71.6	72.1	72.3	72.7	73.1	73.1	73.4	72.8	72.6	72.2	72.0	72.2	72.0	71.9	71.5	71.4	71.0	71.9	134.7	67.9
„ 7,.....	70.8	70.1	70.1	69.7	69.5	69.6	69.7	69.9	70.0	70.3	70.1	70.6	70.3	70.8	71.8	71.0	70.1	70.0	70.2	70.2	70.1	69.7	69.9	70.0	70.2	140.5	70.3
„ 8,.....	69.7	69.5	69.8	69.0	69.0	68.1	68.1	67.6	68.2	68.5	69.1	69.8	71.2	70.7	71.3	71.0	70.3	70.2	69.8	70.8	70.9	70.8	70.7	71.0	69.8	140.2	68.4
„ 9,.....	71.3	71.3	71.3	71.3	71.2	71.1	71.1	71.9	72.3	71.3	70.1	69.5	70.0	69.2	68.3	67.0	65.8	64.3	63.6	63.0	62.8	62.7	62.4	62.0	68.1	138.7	64.5
„ 10,.....	61.8	60.8	60.4	60.4	60.0	59.7	59.7	59.8	60.7	60.3	59.3	58.8	58.7	58.3	58.6	58.1	57.9	57.3	57.3	57.3	57.7	58.3	58.6	58.8	59.1	59.2	88.8	60.8
„ 11,.....	59.1	59.3	59.7	59.8	59.9	60.0	60.7	60.9	61.8	62.3	63.2	64.1	64.0	64.6	64.6	65.0	65.0	65.7	66.0	66.4	66.5	66.7	66.6	66.8	63.3	133.4	60.4
„ 12,.....	66.3	66.5	66.2	66.0	66.0	66.0	66.0	66.6	67.9	68.9	70.0	70.2	71.2	70.6	70.5	70.1	69.1	69.3	70.1	70.0	70.7	71.0	71.0	70.8	68.8	141.7	67.5
„ 13,.....	70.9	70.5	70.0	70.1	69.9	69.7	69.6	70.0	69.6	69.7	69.4	70.6	71.3	71.1	70.7	70.5	69.7	69.9	69.6	69.7	69.2	68.2	69.0	69.5	69.9	135.8	67.5
„ 14,.....	69.4	69.0	69.2	68.0	66.0	65.3	64.4	65.7	66.0	65.9	65.1	64.1	64.7	63.2	61.6	61.3	60.9	59.8	59.2	59.5	61.0	60.6	60.0	60.5	63.8	114.2	64.1
„ 15,.....	59.1	59.2	59.1	58.5	58.0	57.6	57.8	58.4	61.2	62.0	63.0	63.6	64.0	64.8	64.6	64.7	65.0	65.6	65.8	65.9	65.9	66.0	65.8	66.1	62.6	128.2	61.4
„ 16,.....	65.5	65.8	65.4	65.8	65.9	65.9	66.5	66.6	67.5	68.1	69.0	68.2	68.2	69.1	69.3	69.6	69.2	69.7	69.8	69.7	69.7	69.9	69.9	69.9	68.1	127.2	67.2
„ 17,.....	69.8	69.2	69.1	68.9	68.9	69.0	69.1	69.1	69.5	70.0	70.9	70.9	70.7	70.4	70.8	69.9	69.7	69.6	69.5	69.8	69.9	69.9	70.0	70.1	69.8	132.8	69.5
„ 18,.....	70.0	70.0	69.8	69.8	69.3	69.0	69.2	69.2	67.1	65.5	62.5	62.1	61.7	60.8	59.0	59.0	57.9	57.6	58.0	57.4	57.0	56.4	57.4	63.5	129.8	61.1
„ 19,.....	56.1	55.6	55.1	54.0	53.6	53.4	53.3	53.7	54.7	55.3	56.4	56.9	57.8	58.1	58.9	58.4	57.7	57.1	56.8	56.2	57.8	57.1	56.6	57.0	56.1	137.7	54.2
„ 20,.....	56.2	55.9	55.1	54.9	54.0	54.1	54.6	56.0	56.9	58.1	59.0	59.3	60.1	60.9	61.1	60.9	59.8	59.7	*58.4	*57.1	*55.9	54.6	54.2	53.6	57.1	134.2	50.9
„ 21,.....	53.5	53.0	53.1	*51.4	*50.2	*49.4	*49.0	*48.8	*48.8	48.2	48.0	48.8	51.5	53.5	51.1	50.4	50.4	*49.4	*48.6	*47.8	*47.1	46.3	46.0	43.8	49.5	129.6	55.8
„ 22,.....	42.7	42.2	42.8	42.0	41.8	41.1	40.4	40.9	41.1	42.3	43.8	44.3	46.0	46.0	46.1	44.8	44.8	44.6	44.3	44.7	44.1	43.9	44.3	43.9	43.5	125.5	47.6
„ 23,.....	43.9	43.2	42.9	43.4	42.6	42.8	42.5	43.2	44.4	46.4	49.0	50.6	49.6	47.6	47.8	46.3	45.0	44.7	44.6	44.6	44.3	44.4	44.2	44.1	45.1	123.9	46.2
„ 24,.....	44.0	44.6	43.9	44.0	42.3	42.3	43.6	44.8	45.0	46.0	46.9	48.0	49.2	50.3	51.3	48.2	47.8	47.4	47.5	46.4	46.3	47.4	46.8	45.9	46.2	126.7	44.2
„ 25,.....	45.7	45.4	44.8	44.3	44.0	44.6	44.1	45.7	46.6	48.5	49.2	50.6	52.1	52.9	50.9	52.0	52.2	51.9	52.0	52.2	51.7	51.4	51.4	52.1	49.0	125.5	46.8
„ 26,.....	49.7	48.0	46.7	46.5	46.7	46.0	47.5	47.4	48.4	49.4	50.0	49.6	51.1	53.3	53.0	50.8	50.4	49.8	49.3	49.1	49.1	49.1	48.7	48.0	49.1	125.5	44.1
„ 27,.....	47.4	46.9	47.1	47.9	46.4	45.1	45.1	46.2	48.1	49.4	51.3	51.7	53.6	53.6	53.8	53.5	53.0	52.2	52.3	52.1	53.1	53.1	52.1	52.4	50.3	123.5	47.1
„ 28,.....	51.9	49.0	47.6	47.4	45.6	45.4	46.3	47.7	50.2	51.7	52.3	52.3	53.9	54.0	54.2	53.5	53.1	53.3	54.0	54.0	54.2	54.9	54.5	54.8	51.5	123.2	46.0
„ 29,.....	55.3	55.4	55.2	54.7	54.1	53.7	54.2	54.4	54.8	55.9	56.8	57.3	57.3	55.4	55.9	55.8	55.5	55.5	55.3	55.4	55.9	56.1	56.6	56.8	55.6	124.8	51.8
„ 30,.....	56.9	57.0	57.3	57.2	57.1	56.4	56.1	56.4	58.2	57.8	57.3	58.1	59.2	59.3	58.6	58.1	57.8	57.5	57.6	57.8	57.7	58.1	58.2	58.2	57.7	126.1	53.4
.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hourly Means, ...	61.3	61.0	60.8	60.5	60.1	59.8	60.0	60.5	61.2	61.7	62.2	62.4	63.0	63.0	63.0	62.3	61.9	61.6	61.5	61.5	61.5	61.4	61.3	61.2	61.45	127.7	59.6

TABLE IV.

AN HOURLY AND DAILY RELATIVE HUMIDITY AND TENSION OF AQUEOUS VAPOUR FOR THE MONTH OF NOVEMBER, 1884.

Hour.	Hourly Mean. Humidity.	Hourly Mean. Tension.	Date.	Daily Mean. Humidity.	Daily Mean. Tension.
			1884.		
1 a	72	0.502	Nov. 1,.....	81	0.759
2 „	72	0.496	„ 2,.....	86	0.758
3 „	72	0.492	„ 3,.....	90	0.754
4 „	72	0.487	„ 4,.....	87	0.782
5 „	72	0.479	„ 5,.....	87	0.789
6 „	72	0.473	„ 6,.....	84	0.735
7 „	71	0.475	„ 7,.....	79	0.678
8 „	68	0.476	„ 8,.....	80	0.672
9 „	67	0.482	„ 9,.....	72	0.608
10 „	64	0.483	„ 10,.....	68	0.424
11 „	63	0.489	„ 11,.....	74	0.516
Noon.	61	0.487	„ 12,.....	80	0.648
1 p	62	0.498	„ 13,.....	76	0.662
2 „	62	0.497	„ 14,.....	72	0.517
3 „	62	0.498	„ 15,.....	71	0.492
4 „	61	0.484	„ 16,.....	81	0.635
5 „	64	0.486	„ 17,.....	86	0.690
6 „	67	0.489	„ 18,.....	78	0.531
7 „	68	0.491	„ 19,.....	67	0.378
8 „	69	0.495	„ 20,.....	59	0.365
9 „	71	0.502	„ 21,.....	37	0.205
10 „	71	0.501	„ 22,.....	26	0.119
11 „	72	0.502	„ 23,.....	31	0.145
Midt.	73	0.502	„ 24,.....	29	0.146
			„ 25,.....	43	0.216
			„ 26,.....	38	0.202
			„ 27,.....	47	0.243
			„ 28,.....	51	0.271
			„ 29,.....	69	0.371
			„ 30,.....	70	0.407
			.....	...	...
Mean, ...	68	0.490	Mean,.....	67	0.490

TABLE V.

DURATION OF SUNSHINE.

Date.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	Sums.
1884.														
1,	...	0.3	1.0	1.0	0.5	1.0	0.8	0.8	1.0	1.0	1.0	0.1	...	8.5
2,	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3,	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4,	...	...	...	0.1	0.3	0.2	0.4	1.0	1.0	1.0	1.0	0.5	...	5.5
5,	...	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	...	10.0
6,	...	0.5	1.0	1.0	0.7	0.5	0.2	...	...	0.6	0.2	...	...	4.7
7,	...	...	...	0.1	0.7	1.0	1.0	1.0	1.0	0.6	1.0	0.1	...	6.5
8,	...	...	...	...	0.9	1.0	0.9	1.0	1.0	0.7	0.6	...	...	6.1
9,	...	0.5	1.0	1.0	0.2	0.3	0.6	1.0	0.6	0.5	0.8	...	...	6.5
10,	...	...	...	...	...	...	...	...	...	...	...	...	...	...
11,	...	...	0.9	1.0	1.0	1.0	1.0	0.1	...	0.8	1.0	0.3	...	7.1
12,	...	0.1	0.3	0.6	0.1	0.4	0.6	0.4	0.5	0.8	0.5	...	...	4.3
13,	...	...	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	...	9.4
14,	...	...	0.4	0.8	0.9	0.2	0.1	...	...	...	...	...	...	2.4
15,	...	...	...	0.5	0.4	0.1	0.1	...	...	...	...	...	...	1.1
16,	...	...	...	...	0.1	0.1	0.1	...	...	...	...	...	...	0.3
17,	...	...	...	...	0.1	0.3	0.5	0.7	...	...	...	...	...	1.6
18,	...	...	...	...	...	...	...	...	0.7	...	...	...	...	0.7
19,	...	...	...	0.2	...	0.1	0.4	0.9	1.0	1.0	0.7	...	...	4.3
20,	...	0.6	0.8	1.0	1.0	1.0	1.0	1.0	0.5	0.6	...	...	...	7.5
21,	...	0.1	1.0	1.0	0.9	0.5	0.2	0.6	1.0	0.3	0.1	...	...	5.7
22,	...	0.4	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.4	...	9.8
23,	...	0.4	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.3	...	9.7
24,	...	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.3	...	9.8
25,	...	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.3	...	...	8.8
26,	...	0.2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.8	1.0	0.3	...	9.3
27,	...	0.4	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.2	...	9.6
28,	...	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.3	...	9.8
29,	...	0.3	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.3	...	9.6
30,	...	0.4	0.1	0.6	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.4	...	8.5
.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sums,.....	...	6.2	16.4	18.9	18.8	18.7	18.9	19.5	19.3	18.7	17.2	4.5	...	177.1
Means, ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

TABLE VI.

RAINFALL FOR THE MONTH OF NOVEMBER, 1884.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Sums.
Nov. 1,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 2,	...	...	...	...	...	...	...	...	0·005	0·010	0·050	0·010	...	0·015	0·010	...	...	...	...	...	...	...	...	0·055	0·155
„ 3,	...	...	0·020	0·010	...	...	...	...	0·070	0·110	0·030	0·120	0·210	0·040	...	...	...	...	...	0·100	0·100	...	0·035	0·080	0·925
„ 4,	0·035	...	...	...	...	0·025	0·025	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·085
„ 5,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 6,	...	...	...	...	...	...	...	...	...	0·005	...	...	...	...	...	0·010	...	...	...	...	0·070	0·050	0·005	0·005	0·145
„ 7,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 8,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 9,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 10,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 11,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 12,	...	...	...	0·055	0·015	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·070
„ 13,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 14,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 15,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 16,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 17,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·005	...	...	...	...	...	...	...	...	...	0·005
„ 18,	0·015	0·010	0·005	...	...	...	...	...	...	...	0·055	0·005	...	...	...	...	...	...	...	...	...	...	...	...	0·090
„ 19,	...	...	...	...	...	...	0·015	0·005	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·020
„ 20,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 21,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 22,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 23,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 24,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 25,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 26,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 27,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 28,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 29,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 30,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sums, ...	0·050	0·010	0·025	0·065	0·015	0·025	0·040	0·005	0·075	0·125	0·135	0·135	0·210	0·055	0·015	0·010	...	...	...	0·100	0·170	0·050	0·040	0·140	1·495

DIRECTION AND VELOCITY OF THE WIND, FOR THE MONTH OF NOVEMBER, 1884.

Date.	1 a.		2 a.		3 a.		4 a.		5 a.		6 a.		7 a.		8 a.		9 a.		10 a.		11 a.		Noon.		1 p.		2 p.		3 p.		4 p.		5 p.		6 p.		7 p.		8 p.		9 p.		10 p.		11 p.		Midt.		Sums.	Means.
	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.		
Nov. 1,	10	2	10	2	...	1	...	0	...	1	8	4	7	2	...	0	7	2	16	4	18	4	25	2	25	8	25	6	17	5	16	4	29	6	26	5	25	3	25	6	25	3	29	2	80	3.3
,, 2,	...	1	1	2	6	4	9	8	6	9	6	10	7	11	7	22	7	23	7	25	7	28	7	27	7	21	7	29	7	26	7	24	7	26	7	28	7	26	8	27	7	27	7	26	7	23	8	14	464	19.3
,, 3,	7	20	7	19	7	23	7	28	7	26	7	29	7	25	7	23	7	23	7	21	7	21	7	22	10	16	9	17	8	18	7	19	7	19	7	10	7	9	7	11	7	10	6	9	6	8	7	9	7	9	488	20.3
,, 4,	7	16	7	15	7	16	7	26	8	14	9	11	6	10	5	9	8	15	7	12	8	12	10	9	9	12	8	16	9	14	7	12	7	10	7	9	7	11	7	10	6	9	6	8	7	9	7	9	288	12.0
,, 5,	7	11	7	10	7	9	8	8	6	7	6	8	7	9	5	12	7	11	9	17	10	17	10	18	9	21	9	19	9	17	9	17	9	16	10	9	11	4	11	4	11	3	11	2	...	0	11	5	254	10.6
,, 6,	8	4	8	5	7	5	6	5	6	4	6	5	4	5	4	2	5	10	7	14	9	23	8	20	7	21	8	21	7	22	8	21	7	23	7	19	7	21	7	24	7	27	7	27	7	29	7	26	383	16.0
,, 7,	7	28	7	28	6	28	7	26	6	30	7	27	7	25	7	26	7	26	7	31	7	30	7	24	7	20	7	19	8	22	8	24	8	28	8	28	9	29	9	34	8	36	8	31	7	30	658	27.4
,, 8,	7	31	7	30	7	28	7	30	7	28	6	30	7	29	7	30	7	28	7	32	7	29	7	26	8	25	9	26	9	27	8	28	8	21	9	15	8	14	8	16	7	12	7	12	8	15	8	13	570	23.7
,, 9,	7	10	5	9	5	10	7	10	5	11	6	6	...	1	8	4	10	6	2	10	32	18	32	17	32	11	32	9	32	14	1	15	1	17	1	15	1	16	2	14	1	4	1	7	31	6	1	7	247	10.3
,, 10,	2	12	2	16	2	16	2	16	2	17	1	21	1	18	2	13	3	13	3	12	32	19	32	19	32	20	32	19	32	17	32	14	32	16	32	15	32	16	1	13	1	10	4	12	4	16	6	20	379	16.8
,, 11,	6	18	6	19	5	19	5	18	6	19	4	17	5	17	5	19	7	18	7	20	8	19	8	17	7	18	7	21	8	20	8	19	8	21	7	18	7	20	8	21	7	20	7	17	7	16	7	12	6	15	504	21.0
,, 12,	7	27	8	28	8	27	7	24	7	23	8	13	7	16	7	19	8	20	8	19	8	21	7	21	8	20	8	19	8	21	7	18	7	18	7	20	8	21	7	20	7	17	7	16	7	9	6	12	467	19.5
,, 13,	5	12	7	16	6	14	5	12	5	10	7	8	5	12	6	10	7	14	7	17	8	17	9	15	9	14	10	14	11	16	11	11	11	16	11	10	9	9	9	2	10	6	6	7	9	6	12	282	11.7
,, 14,	5	16	7	16	6	16	6	17	2	9	8	7	6	9	9	6	4	13	4	19	3	18	3	17	5	17	3	16	1	17	1	20	1	18	1	19	1	17	1	14	4	12	3	12	2	12	5	15	352	14.7
,, 15,	2	12	2	10	3	5	1	5	32	6	32	9	1	8	32	7	6	17	5	15	5	16	7	18	8	24	8	26	7	23	8	24	7	25	6	23	5	23	7	21	6	19	7	22	6	21	7	24	403	16.8
,, 16,	7	24	7	23	7	26	8	21	8	17	8	22	7	24	7	27	8	24	7	25	7	25	7	22	7	20	7	23	7	20	7	20	8	23	7	19	7	20	7	22	7	23	7	22	7	23	7	19	534	22.2
,, 17,	7	19	7	20	7	17	7	21	7	20	7	20	7	25	7	25	7	24	7	28	7	25	7	24	7	22	7	22	8	18	7	24	7	22	7	20	7	25	7	26	7	24	7	25	7	25	7	25	533	22.2
,, 18,	6	25	7	25	7	24	7	23	6	25	6	23	7	19	7	19	7	21	28	18	27	17	32	13	1	20	32	17	1	13	1	13	32	13	31	9	32	7	32	6	32	8	1	10	1	11	1	2	381	15.9
,, 19,	32	21	32	14	32	15	32	25	32	22	32	18	1	11	2	10	1	13	1	15	1	12	1	11	32	12	31	11	1	13	32	13	32	12	32	11	1	14	1	9	28	2	1	8	1	7	1	5	305	12.7
,, 20,	1	7	1	5	32	9	32	11	32	12	1	4	2	5	3	7	1	12	1	13	1	15	32	18	1	14	1	12	2	12	1	13	1	14	2	12	1	22	1	20	2	22	1	26	2	28	4	23	336	14.0
,, 21,	3	18	2	14	2	10	2	19	2	22	2	23	2	15	32	11	1	13	30	13	32	18	32	19	1	17	1	19	1	22	32	15	31	17	31	20	31	18	32	35	32	29	32	27	1	25	1	40	469	19.5
,, 22,	1	46	1	49	2	40	2	24	2	26	2	39	2	46	1	43	1	35	1	28	1	23	32	21	31	15	31	15	32	13	1	16	1	10	1	10	32	8	2	14	1	19	1	24	1	23	1	25	599	25.0
,, 23,	2	6	1	10	1	5	1	6	1	13	32	11	2	19	1	17	1	17	1	10	6	6	7	4	24	6	32	11	2	18	1	13	1	14	32	14	32	15	32	16	32	25	32	23	1	27	1	25	331	13.8
,, 24,	1	17	16	5	31	5	16	5	1	27	1	27	26	6	4	6	2	8	1	13	32	12	30	7	24	7	22	5	24	5	32	12	32	11	2	10	2	16	1	18	1	16	3	13	1	18	1	17	288	11.8
,, 25,	1	20	1	20	1	26	1	26	1	25	2	15	1	18	1	12	1	10	3	14	5	15	8	13	11	11	10	6	23	4	23	8	23	2	18	5	11	6	10	4	12	2	12	2	...	1	...	1	261	10.9
,, 26,	...	1	3	4	1	11	1	11	2	16	2	14	4	4	1	13	32	9	4	18	32	17	1	21	4	13	9	10	1	8	2	9	3	10	1	9	32	13	1	12	1	16	1	17	32	20	32	16	288	12.0
,, 27,	1	20	1	20	2	21	3	15	3	18	2	26	32	18	2	12	5	8	5	10	6	14	6	8	10	14	8	17	10	10	9	16	9	16	8	9	7	7	7	5	12	3	13	4	...	1	14	2	345	14.4
,, 28,	7	6	32	11	32	16	32	18	32	27	32	24	32	17	1	7	4	4	6	13	7	17	8	20	8	20	7	22	8	22	8	20	7	18	6	13	6	10	4	9	4	8	3	8	4	10	5	10	313	13.0
,, 29,	4	15	4	14	3	16	4	16	4	17	5	15	4	18	4	16	7	11	9	12	12	10	10	17	9	18	9	18	10	22	10	22	8	17	7	11	7	7	7	6	10	2	7	3	5	5	4	3	275	11.5
,, 30,	5	6	5	6	4	9	5	11	5	13	6	11	4	10	5	7	5	11	8	18	8	21	9	19	10	20	10	19	9	20	8	20	9	16	7	11	7	8	7	6	10	2	7	3	5	5	4	3	...	...
.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sums,	...	471	...	465	...	471	...	479	...	514	...	487	...	457	...	429	...	459	...	509	...	534	...	505	...	500	...	495	...	502	...	497	...	488	...	436	...	452	...	443	...	424	...	450	...	455	...	457	11359	473.3
Hourly Means,	...	18.7	...	18.5	...	18.7	...	19.0	...	17.1	...	16.2	...	14.8	...	14.3	...	15.3	...	17.0	...	17.8	...	16.8	...	16.7	...	16.5	...	16.7	...	16.6	...	16.3	...	14.5	...	15.1	...	14.8	...	14.1	...	15.0	...	15.3	...	15.2	378.6	15.8

TABLE XI.
VICTORIA PEAK.

Date.	Barometer.			Temperature.					
	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.	Sun.	Max.	Min.
1884.	ins.	ins.	ins.	°	°	°	°	°	°
Nov. 1,.....	28.235	28.113	28.140	69.8	72.8	70.8	126.0	72.9	67.0
„ 2,.....	28.199	28.145	28.144	68.8	67.8	67.8	87.0	70.9	67.8
„ 3,.....	28.194	28.137	28.141	68.0	67.6	67.2	96.0	69.9	67.0
„ 4,.....	28.156	28.090	28.147	69.8	69.2	70.8	133.0	71.9	67.0
„ 5,.....	28.177	28.135	28.176	71.2	71.2	69.8	135.0	73.7	66.0
„ 6,.....	28.215	28.156	28.185	71.6	68.8	68.8	140.0	72.9	67.0
„ 7,.....	28.189	28.142	28.174	66.4	68.8	68.2	130.0	70.9	65.0
„ 8,.....	28.225	28.159	28.202	65.4	67.2	68.8	117.0	69.9	64.8
„ 9,.....	28.240	28.192	28.264	69.8	69.6	65.8	133.0	71.5	64.0
„ 10,.....	28.315	28.260	28.261	59.6	57.8	56.8	80.0	65.9	55.0
„ 11,.....	28.294	28.234	28.230	58.4	62.4	61.0	127.0	64.9	56.0
„ 12,.....	28.295	28.225	28.208	64.6	67.8	65.0	134.0	68.5	57.0
„ 13,.....	28.306	28.252	28.267	69.6	72.6	63.8	130.0	72.9	61.0
„ 14,.....	28.292	28.233	28.289	62.8	60.8	59.8	86.4	63.9	57.0
„ 15,.....	28.261	28.154	28.210	59.6	62.8	62.8	134.4	64.9	56.2
„ 16,.....	28.199	28.163	28.182	65.0	64.8	65.8	122.8	66.9	62.0
„ 17,.....	28.164	28.126	28.114	65.8	65.8	65.0	101.0	67.3	64.2
„ 18,.....	28.149	28.091	28.108	65.4	59.8	58.8	95.0	65.9	56.0
„ 19,.....	28.174	28.112	28.110	56.2	59.8	57.8	120.0	60.3	51.0
„ 20,.....	28.183	28.129	28.190	58.8	63.0	60.8	126.0	64.5	50.4
„ 21,.....	28.255	28.213	28.290	54.2	56.8	48.8	121.2	60.8	48.8
„ 22,.....	28.329	28.276	28.315	48.8	54.0	50.8	115.0	54.3	44.0
„ 23,.....	28.338	28.258	28.287	49.8	54.8	48.8	116.0	55.9	46.0
„ 24,.....	28.301	28.242	28.281	51.8	57.8	51.8	119.0	57.9	47.0
„ 25,.....	28.337	28.291	28.316	52.8	56.8	53.4	121.0	56.9	46.2
„ 26,.....	28.373	28.304	28.300	52.8	55.8	54.2	116.0	56.3	46.0
„ 27,.....	28.340	28.290	28.365	53.8	54.8	52.8	120.0	57.5	47.0
„ 28,.....	28.348	28.287	28.331	55.0	55.8	53.8	118.0	56.9	49.0
„ 29,.....	28.331	28.259	28.296	55.8	56.8	54.8	120.8	58.3	49.0
„ 30,.....	28.334	28.269	28.316	57.8	56.8	53.8	120.8	58.9	52.0
.....	...	...	...	...	...	...	...	...	...
Mean,.....	28.258	28.198	28.228	61.3	62.7	60.6	118.0	64.8	56.5

TABLE XII.
TEMPERATURE.

Date.	Cape d'Aguilar.					M
	4 a.	10 a.	4 p.	10 p.	Max.	
1884.	°	°	°	°	°	
Nov. 1,.....	73.6	80.6	81.6	75.6	83.8	
„ 2,.....	74.9	72.6	75.6	74.4	76.8	
„ 3,.....	74.4	74.6	74.6	74.6	75.2	
„ 4,.....	74.2	75.6	75.6	75.6	76.3	
„ 5,.....	75.3	76.6	76.6	75.3	77.6	
„ 6,.....	73.7	76.6	75.6	75.5	76.6	
„ 7,.....	74.1	74.1	74.1	75.3	75.7	
„ 8,.....	73.6	72.6	73.6	72.6	75.8	
„ 9,.....	76.6	77.1	77.6	69.6	77.8	
„ 10,.....	66.6	66.6	65.6	63.6	70.8	
„ 11,.....	65.1	65.6	69.6	71.6	71.8	
„ 12,.....	71.4	73.8	73.6	73.6	74.8	
„ 13,.....	73.6	75.6	75.6	74.6	76.8	
„ 14,.....	73.1	69.6	69.6	67.0	75.3	
„ 15,.....	64.1	67.1	69.6	69.6	70.8	
„ 16,.....	70.6	72.6	70.6	71.6	72.8	
„ 17,.....	71.4	74.6	72.6	72.4	74.6	
„ 18,.....	72.3	72.1	65.6	62.1	73.6	
„ 19,.....	60.1	64.6	69.6	64.2	70.2	
„ 20,.....	61.1	71.6	72.6	62.1	74.8	
„ 21,.....	60.1	60.6	64.6	57.1	64.8	
„ 22,.....	54.6	57.6	60.6	56.6	64.8	
„ 23,.....	54.4	62.1	62.6	57.9	65.8	
„ 24,.....	54.8	61.6	66.6	60.6	67.8	
„ 25,.....	55.8	60.6	60.6	59.4	61.8	
„ 26,.....	56.8	60.0	64.6	61.6	67.5	
„ 27,.....	57.6	60.6	61.0	59.6	62.8	
„ 28,.....	57.6	61.6	63.6	62.6	64.2	
„ 29,.....	59.6	61.6	62.6	62.6	63.8	
„ 30,.....	62.6	64.6	64.6	62.1	65.0	
.....	...	...	...	...	...	
Mean, ...	66.5	68.8	69.7	67.4	71.7	

TABLE XIII.

RELATIVE HUMIDITY.

Date.	Observatory.			Cape d'Aguilar.				Victoria Peak.		
	10 a.	4 p.	10 p.	4 a.	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.
1884.										
1	74	71	83	90	80	77	88	95	86	92
2	87	85	84	95	98	93	90	99	99	99
3	93	88	94	97	93	90	93	98	97	97
4	80	79	90	94	88	92	92	95	97	95
5	81	81	93	93	90	90	88	95	88	85
6	75	80	88	91	84	88	86	90	95	95
7	74	76	77	90	85	83	82	96	91	92
8	74	78	86	88	85	90	95	97	94	90
9	71	60	65	84	77	67	73	88	78	79
10	65	70	72	81	81	76	85	83	84	88
11	70	71	80	84	87	87	83	92	91	98
12	75	72	86	88	80	83	91	95	89	93
13	69	63	76	93	79	79	81	83	70	84
14	69	65	71	81	82	77	74	89	83	88
15	62	69	86	84	79	78	85	80	83	94
16	70	92	86	83	76	97	97	82	99	99
17	80	87	87	93	84	90	92	99	94	98
18	82	67	70	89	93	76	89	97	88	88
19	66	58	66	85	74	68	83	85	75	71
20	60	53	57	85	64	60	83	77	73	83
21	33	31	34	73	52	46	55	45	43	33
22	24	20	30	52	49	38	54	40	39	36
23	34	22	26	37	46	46	47	60	35	46
24	27	23	30	51	48	39	52	43	49	49
25	35	38	66	46	47	47	68	48	52	58
26	39	29	33	61	60	41	50	56	53	54
27	40	45	71	55	52	60	68	57	52	68
28	49	48	68	72	54	55	69	56	62	81
29	66	55	79	88	80	64	80	76	59	81
30	63	58	86	80	76	70	89	75	74	87
.....	...	...	...	...	...	...	...	...	...	...
Mean	63	61	71	79	74	71	79	79	76	80

TABLE XIV.

TENSION OF AQUEOUS VAPOUR EXPRESSED IN INCHES OF MERCURY.

Date.	Observatory.			Victoria Peak.		
	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.
1884.						
1	0.781	0.763	0.762	0.690	0.689	0.690
2	0.754	0.759	0.780	0.702	0.678	0.678
3	0.768	0.749	0.785	0.676	0.659	0.650
4	0.765	0.780	0.790	0.690	0.697	0.714
5	0.778	0.807	0.786	0.724	0.672	0.618
6	0.720	0.741	0.741	0.703	0.666	0.666
7	0.665	0.689	0.659	0.625	0.643	0.637
8	0.626	0.696	0.716	0.611	0.629	0.637
9	0.678	0.541	0.475	0.646	0.565	0.500
10	0.435	0.412	0.425	0.425	0.402	0.403
11	0.483	0.539	0.603	0.453	0.511	0.529
12	0.638	0.653	0.721	0.580	0.608	0.576
13	0.633	0.633	0.623	0.599	0.561	0.494
14	0.553	0.450	0.458	0.506	0.445	0.453
15	0.453	0.526	0.604	0.409	0.476	0.538
16	0.602	0.702	0.693	0.510	0.612	0.633
17	0.677	0.695	0.696	0.633	0.599	0.609
18	0.615	0.418	0.398	0.611	0.458	0.436
19	0.359	0.381	0.385	0.383	0.389	0.337
20	0.382	0.403	0.321	0.379	0.419	0.440
21	0.177	0.188	0.164	0.189	0.200	0.112
22	0.104	0.100	0.132	0.134	0.160	0.131
23	0.166	0.122	0.122	0.211	0.149	0.156
24	0.138	0.138	0.160	0.168	0.232	0.186
25	0.187	0.228	0.309	0.193	0.240	0.236
26	0.210	0.181	0.182	0.221	0.232	0.227
27	0.212	0.272	0.342	0.232	0.225	0.269
28	0.263	0.282	0.360	0.242	0.278	0.333
29	0.366	0.333	0.405	0.335	0.271	0.347
30	0.388	0.376	0.455	0.358	0.344	0.360
.....	...	...	...	...	...	...
Mean	0.486	0.485	0.500	0.461	0.457	0.458

TABLE XV.

RAINFALL AT DIFFERENT STATIONS.

Date.	Observatory.		Stone Cutters' Island.	Victoria P
	Amount.	Duration.	Amount.	Amount
1884.	ins.	hrs.	ins.	ins.
Nov. 1,.....	0.015	1	...	...
„ 2,.....	0.350	10	0.14	0.66
„ 3,.....	0.800	12	0.56	0.64
„ 4,.....	...	0	...	...
„ 5,.....	0.005	0	...	...
„ 6,.....	0.140	3	...	...
„ 7,.....	...	0	...	0.13
„ 8,.....	...	0	...	...
„ 9,.....	...	0	...	...
„ 10,.....	...	0	...	...
„ 11,.....	0.070	1	...	...
„ 12,.....	...	0	...	...
„ 13,.....	...	0	...	...
„ 14,.....	...	0	...	...
„ 15,.....	...	0	...	...
„ 16,.....	...	0	...	0.12
„ 17,.....	0.035	3	...	0.48
„ 18,.....	0.080	3	0.20	0.21
„ 19,.....	...	0	...	...
„ 20,.....	...	0	...	...
„ 21,.....	...	0	...	...
„ 22,.....	...	0	...	...
„ 23,.....	...	0	...	...
„ 24,.....	...	0	...	...
„ 25,.....	...	0	...	...
„ 26,.....	...	0	...	...
„ 27,.....	...	0	...	...
„ 28,.....	...	0	...	...
„ 29,.....	...	0	...	...
„ 30,.....	...	0	...	...
.....	...	...	...	...
Total,.....	1.495	33	0.90	2.24

W. Doberck,
Government Astron

Hongkong Observatory, 11th July, 1885.

Weather Report for December, 1884.

In the *China Coast Meteorological Register*, based on information transmitted by the Great Northern and the Eastern Extension Telegraph Companies—which I have published daily, is given a summary of the atmospheric circumstances in Manila and along the Coast of China between Haiphong and Shanghai. It also contains information concerning the weather in Nagasaki and Wladivostock, and the first appearance and progress of Typhoons.

At the end of November and in the beginning of December strong NE gales blew over the China Sea. The barometer reached a maximum 30.01 at 10 a. on the 7th in Manila. On the morning of the same day it blew a fresh NE gale with drizzling rain at S. Cape (Formosa). At 10 a. on the 8th, the barometer had fallen to 29.98 at Manila and a light NNW breeze was reported from Bolinao. At this time the centre of typhoon XIX may have been about 13° N, and 123°–124° E. The barometer was falling along the Coast of China. Gradients indicated fresh N winds. The temperature had risen in the south, and the air was very dry. At 8 p. the height of the barometer was 29.78 and a gentle or moderate N breeze blew at Bolinao.

At 5h. 30m. a. on the 9th, the height of the barometer was 29.86, and the breeze had veered to NE at Bolinao. The fall in the barometer continued along the coast, particularly in the SE. Fine and dry weather accompanied by NE gales prevailed over the China Sea. At 10 a. the height of the barometer was 29.91 at Manila. The centre of the typhoon may have been in 12°–13° N, and about 121° E.

At 5 a. on the 10th it blew a moderate N gale at Bolinao, the clouds came from NE and the barometer was rising. It was steady along the coast. Gradients indicated more moderate NE winds. The centre of the typhoon was probably in about 11° N, 118°–119° E at 10 a. A moderate NNE gale was reported from Bolinao at 4 p. The South Cone was hoisted at 12h. 10m. p., and was taken down next day at 12h. 30m. p.

At 10 a. on the 11th the typhoon had disappeared. Most likely it was moving SWestward. Gentle NE winds and fine weather with blue sky were reported from all stations between Tonquin, Luzon and Wladivostock.

The increased speed of the progressive motion of typhoons with increasing geographical latitude, set forth in my report of the 16th July, 1885, (Appendix *M*), is probably connected with the corresponding increase of barometrical depression. In a typhoon in the China Sea the pressure falls seldom much below 29.00 inches, and it falls frequently much more after reaching a higher latitude. The frequently steeper gradients in a higher latitude apparently increase the progressive speed although the corresponding maximum force of the wind is at least near the surface of the earth, considerably less than within the tropics.

The Barograph and the Standard Barometer at the Observatory are placed 110 feet above Mean Sea Level. The bulbs of the Thermograph Thermometers are 111 feet above Mean Sea Level and 6 feet above the ground. They are exposed in an unpainted and double-louvered zinc screen fixed to the north wall of the main building in a shaded position. The Solar Radiation Maximum Thermometer is 109 feet above Mean Sea Level and 4 feet above the ground, and the Terrestrial Radiation Minimum Thermometer is about one inch above the ground. The self-recording Rain-gauge is placed 106 feet above Mean Sea Level, and the rim, which is 14¼ inches in diameter, is 21 inches above the ground. The cups of the Anemograph are 45 feet above the ground, and 150 feet above Mean Sea Level.

At Victoria Peak the Instruments, except the Radiation Thermometers, are placed in the Lookout. The Barometer is 1821 feet above Sea Level. The bulbs of the Thermometers are about 4 feet above the floor, except the Maximum Thermometer, which is a few inches higher. The Radiation Thermometers are placed at the same height above the ground as at the Observatory. At Cape d'Aguilar the Thermometers are placed about 170 feet above Sea Level (according to the *Government Gazette*) in a wooden screen 2 feet above the ground, except the Maximum Thermometer, which is a few inches higher.

Table I exhibits the hourly readings of the Barometer reduced to 32°.0 Fahrenheit, but not to Sea Level, as measured (at two minutes to the hour named) from the Barograms. The Mean Height

TABLE II.

TEMPERATURE FOR THE MONTH OF DECEMBER, 1884.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means.	Max.	Min.
Dec. 1,	60.1	59.8	60.2	60.6	60.8	60.9	61.5	62.7	64.3	65.0	66.2	67.7	68.7	69.4	68.8	67.5	65.6	64.1	63.7	63.0	62.8	63.4	64.4	64.5	64.0	69.4	59.7
,, 2,	64.8	64.8	64.6	64.6	64.3	64.0	64.1	65.1	66.2	67.2	68.0	68.4	68.2	70.3	68.8	67.0	65.9	64.8	64.9	64.8	64.9	65.0	65.1	65.0	65.9	70.3	63.7
,, 3,	65.0	64.8	64.8	64.5	64.5	64.3	64.0	64.8	67.3	68.4	69.0	69.9	70.9	70.5	68.8	68.3	66.3	65.3	65.1	65.1	64.9	64.6	64.1	63.8	66.2	71.1	63.7
4,	63.7	63.7	63.3	63.1	63.1	62.9	62.1	62.8	64.0	65.3	66.2	67.1	68.3	68.8	68.0	66.6	64.8	63.9	63.4	62.4	61.8	61.9	61.7	61.1	64.2	68.8	61.1
,, 5,	60.5	59.9	59.1	59.1	59.0	58.7	58.6	59.0	59.3	61.7	63.0	63.5	64.4	64.7	65.3	64.9	63.7	61.6	59.9	58.7	58.1	57.8	57.0	56.3	60.6	65.3	56.3
,, 6,	55.6	55.0	54.9	55.0	53.7	53.2	53.7	54.4	54.8	55.9	57.6	57.9	59.8	60.0	60.5	60.9	59.9	59.1	58.7	57.6	56.9	55.0	54.5	54.7	56.6	60.9	53.1
,, 7,	54.0	52.4	51.2	52.1	52.1	52.1	53.3	54.6	57.3	59.6	59.5	61.2	62.1	64.0	65.0	64.3	63.3	62.1	61.2	60.1	59.2	58.1	56.4	55.1	57.9	65.8	51.1
,, 8,	54.4	53.7	53.1	53.1	53.0	53.5	54.4	55.5	56.5	58.5	60.6	62.0	63.2	64.2	64.2	63.8	62.9	62.1	61.6	60.8	59.8	58.6	57.2	55.2	58.4	64.3	52.7
,, 9,	55.5	54.3	53.8	52.9	53.1	52.7	51.9	54.8	56.8	59.2	61.6	63.1	64.2	65.4	65.6	65.2	63.7	62.3	61.0	59.8	59.8	57.8	57.1	56.2	58.6	65.8	51.7
,, 10,	58.5	58.6	58.2	56.4	56.0	55.8	55.4	56.5	58.0	60.2	62.9	64.2	65.9	66.6	65.7	64.7	62.0	59.7	59.5	57.7	56.8	56.6	55.9	56.4	59.5	66.7	54.3
,, 11,	56.6	58.0	57.0	58.8	56.8	58.6	58.6	59.0	61.9	63.7	64.9	65.9	66.3	67.0	67.0	66.4	63.8	61.3	60.3	59.8	59.2	58.0	57.2	57.0	61.0	67.5	56.4
,, 12,	58.1	56.9	57.0	55.7	55.6	54.9	55.0	56.4	58.3	59.9	60.7	61.7	62.7	63.5	62.8	61.6	59.8	57.8	57.0	56.4	55.9	55.0	54.8	54.8	58.0	63.6	54.6
,, 13,	54.7	55.2	53.9	53.8	53.7	53.3	53.7	55.6	57.4	59.2	61.7	63.6	64.7	64.0	63.8	62.2	60.0	58.6	57.7	56.6	56.5	55.6	55.5	54.7	57.7	64.7	53.3
,, 14,	54.3	54.0	53.6	53.6	53.2	53.0	53.5	55.3	60.2	62.2	64.9	66.1	67.5	68.2	67.5	66.0	64.6	62.2	61.2	58.9	57.9	57.1	56.0	55.6	59.4	68.4	53.0
,, 15,	55.7	55.8	54.9	54.7	54.8	55.0	54.9	56.9	59.7	61.6	63.7	65.0	66.2	66.3	65.4	64.3	62.2	60.1	59.5	58.8	58.0	57.7	57.8	56.3	59.4	66.4	54.6
,, 16,	57.0	57.3	56.6	55.2	55.0	54.5	55.2	57.3	59.2	62.3	64.4	65.7	66.1	65.6	64.5	63.7	62.3	61.4	60.8	60.7	60.8	60.8	60.7	60.3	60.3	66.3	54.4
,, 17,	60.6	60.3	60.1	59.7	59.6	59.1	59.4	60.2	62.0	63.7	66.6	67.9	69.2	68.4	66.8	66.6	65.2	63.6	63.3	62.9	62.3	62.1	61.7	61.1	63.0	69.3	59.1
,, 18,	60.9	60.8	60.3	59.3	58.9	56.7	55.7	56.1	57.6	59.1	61.7	63.1	64.9	65.1	65.6	63.5	62.3	60.9	60.4	59.9	58.1	57.2	56.1	55.5	60.0	65.7	55.5
,, 19,	55.2	54.2	53.7	53.3	52.6	51.7	51.6	51.9	53.7	56.0	57.8	60.1	61.8	62.1	62.0	61.3	58.6	56.7	56.6	56.6	56.5	56.6	56.4	56.8	56.4	62.4	50.9
,, 20,	57.4	56.7	56.3	55.6	55.4	55.6	55.6	56.0	58.1	60.3	62.2	62.4	62.9	62.5	62.0	60.9	59.7	59.2	59.0	58.9	57.7	57.5	57.2	57.5	58.6	63.1	55.3
,, 21,	57.2	56.8	56.5	55.7	55.4	55.0	54.2	56.0	58.2	60.0	61.7	62.8	63.6	63.5	62.8	61.8	60.2	58.5	57.5	56.9	56.1	55.9	56.4	56.9	58.3	63.7	54.1
,, 22,	57.0	56.6	57.0	56.5	56.0	55.7	55.8	57.1	58.2	59.2	60.6	61.6	62.6	62.2	61.9	61.2	60.1	58.2	57.1	56.2	55.8	55.6	55.5	55.6	58.1	62.7	55.3
,, 23,	54.9	54.9	54.5	54.3	53.9	54.9	53.7	55.5	58.1	60.2	62.5	63.5	64.6	64.6	64.4	63.1	61.1	58.5	57.1	56.7	55.8	55.3	55.0	55.0	58.0	64.8	53.5
,, 24,	55.6	55.3	55.9	55.6	55.0	54.5	55.0	56.6	58.3	60.0	61.8	63.3	64.9	65.9	65.6	64.2	61.7	59.4	58.4	57.2	56.6	56.1	56.1	56.6	58.7	66.0	54.0
,, 25,	56.3	56.0	56.0	55.6	55.8	55.9	56.2	57.5	59.0	61.2	63.3	65.0	67.2	67.7	66.9	64.8	63.0	61.4	60.7	59.8	59.8	60.1	60.0	59.4	60.4	68.2	55.6
,, 26,	59.0	58.6	58.2	58.4	58.3	58.2	58.1	57.8	58.6	59.7	60.9	63.2	64.6	65.8	63.7	61.6	59.7	58.4	57.6	57.1	56.9	57.2	57.9	57.8	59.5	65.8	56.9
,, 27,	57.8	57.5	57.0	56.6	55.5	54.9	55.1	55.8	56.9	57.7	58.6	59.6	60.7	60.4	60.1	58.9	57.8	56.8	57.2	57.5	57.9	57.7	57.2	56.9	57.6	60.8	54.8
,, 28,	56.8	56.6	56.1	55.9	55.7	55.8	56.0	57.6	58.9	60.3	62.9	63.4	64.2	64.2	64.1	63.8	62.1	60.4	59.9	59.9	59.8	59.8	60.2	60.0	59.8	64.3	55.7
,, 29,	59.9	59.7	58.7	57.4	58.3	57.8	58.0	59.9	62.2	64.3	66.0	67.8	68.4	68.9	68.1	66.1	63.8	60.9	59.1	56.8	55.5	54.6	53.4	53.0	60.8	68.9	53.0
,, 30,	51.5	51.3	50.4	49.7	49.2	49.5	49.0	50.0	52.1	52.9	55.3	58.1	60.4	59.0	60.4	59.3	58.0	55.7	55.6	55.4	55.1	54.9	54.6	54.8	54.3	60.8	49.0
,, 31,	55.7	55.9	55.6	54.8	54.1	54.6	54.5	55.4	56.6	58.1	59.8	59.6	59.9	60.3	60.2	58.8	57.8	56.0	56.0	56.2	56.5	57.1	57.2	57.3	57.0	60.5	54.4
Hourly Means,	57.6	57.3	56.9	56.5	56.2	56.0	56.1	57.2	59.0	60.7	62.5	63.7	64.8	65.1	64.7	63.7	62.0	60.4	59.7	59.0	58.5	58.1	57.8	57.5	59.6	65.6	55.2

TABLE III.

TEMPERATURE OF EVAPORATION AND RADIATION, FOR THE MONTH OF DECEMBER, 1884.

Date.	1 a.	2 a.	3 a.	4 a.	5 a.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.	Midt.	Means.	Sun.	Rad.
Dec. 1,.....	58.4	58.2	57.8	57.6	57.5	57.3	57.9	58.0	58.0	58.4	59.3	60.3	60.9	61.5	61.4	61.2	60.4	60.5	60.4	60.7	60.8	61.5	61.7	61.5	59.6	126.6	51.9
,, 2,.....	60.4	58.6	59.0	59.0	58.8	59.0	59.4	59.5	59.8	58.7	59.2	60.2	60.0	61.6	61.7	61.2	61.0	61.0	61.3	61.2	61.4	61.4	61.2	60.6	60.2	133.2	62.1
,, 3,.....	60.6	60.2	59.8	59.1	58.9	59.2	59.2	60.3	61.2	61.5	61.8	61.8	62.5	62.3	63.2	62.9	62.2	62.9	61.8	61.8	61.3	61.1	60.7	60.0	61.1	126.5	58.8
,, 4,.....	59.9	59.6	59.3	59.1	59.1	58.5	57.8	57.8	58.6	58.0	59.1	58.9	59.9	60.0	60.1	60.0	59.2	58.5	57.9	55.4	55.4	56.7	56.1	55.3	58.3	126.1	56.8
,, 5,.....	55.2	54.8	54.1	53.8	53.6	53.4	52.9	53.0	*53.7	54.1	55.2	54.8	55.3	55.0	55.0	54.5	53.6	52.7	51.9	51.4	51.3	51.6	50.7	50.5	53.4	130.9	53.6
,, 6,.....	50.1	49.9	49.6	49.4	49.4	49.6	49.7	50.5	50.8	51.1	52.3	52.3	53.4	53.1	53.2	53.3	52.0	51.8	51.9	51.0	51.3	50.4	49.8	49.7	51.1	101.3	50.6
,, 7,.....	49.6	49.1	48.8	49.2	49.1	49.3	50.5	51.1	52.6	53.9	52.6	53.8	53.8	54.8	55.4	54.7	54.1	53.9	54.0	53.4	52.1	51.8	50.0	48.9	51.9	125.2	50.3
,, 8,.....	48.0	47.4	47.5	47.0	47.1	46.5	45.8	45.2	45.1	46.7	47.8	48.7	49.1	49.9	49.5	48.8	47.9	46.8	46.7	46.8	47.0	46.0	45.6	46.2	47.2	128.2	45.3
,, 9,.....	44.9	45.0	43.2	43.2	42.9	44.4	42.2	43.9	43.9	44.9	48.3	47.1	47.3	48.0	47.7	48.8	48.7	47.4	49.5	50.0	48.6	49.2	47.8	47.0	46.4	129.1	42.1
,, 10,.....	45.4	45.2	44.9	46.1	45.4	†46.3	†46.1	†46.7	†48.2	†50.7	51.4	52.1	52.1	52.2	52.8	53.2	51.4	51.2	50.8	52.4	51.1	51.0	51.2	50.2	49.5	126.2	40.5
,, 11,.....	50.3	49.4	49.3	47.6	48.7	47.2	46.0	48.6	49.0	49.6	50.0	52.2	50.2	51.5	50.3	50.2	53.2	52.8	53.3	53.8	53.3	53.0	53.1	51.3	50.6	127.7	46.0
,, 12,.....	48.6	46.2	45.5	44.9	44.2	43.6	43.6	45.4	46.9	47.8	49.0	50.0	50.9	52.1	51.7	51.7	51.0	50.5	50.5	50.3	50.1	50.1	50.6	50.8	48.6	122.4	44.2
,, 13,.....	51.1	51.3	51.3	50.8	50.9	51.0	51.4	52.2	53.3	53.8	54.2	53.1	55.7	56.3	54.5	54.7	53.8	52.4	52.2	52.2	51.9	51.8	51.8	51.7	52.6	122.6	46.0
,, 14,.....	51.6	51.8	51.8	51.4	51.1	51.1	50.9	51.1	49.0	50.7	52.0	50.9	49.8	50.8	55.7	56.1	55.7	55.0	55.3	53.9	54.1	53.0	52.8	51.8	52.4	128.8	42.6
,, 15,.....	51.6	51.5	50.9	51.3	50.9	49.6	49.0	47.6	48.1	49.3	51.2	52.2	51.2	51.0	50.0	51.9	52.0	50.9	51.7	52.0	52.3	52.1	52.5	52.3	51.0	128.5	40.4
,, 16,.....	51.7	51.7	51.5	51.0	50.9	51.0	50.1	49.9	51.2	51.9	53.5	54.2	55.1	56.0	55.7	56.1	56.4	56.0	56.1	56.6	56.8	56.9	57.0	56.3	53.9	127.5	46.0
,, 17,.....	56.4	56.3	56.1	56.7	56.9	56.2	56.3	57.0	57.6	57.6	59.2	60.0	61.4	61.4	59.7	59.9	58.3	58.6	57.6	58.3	58.8	56.7	56.3	54.9	57.8	127.6	58.8
,, 18,.....	55.0	54.7	53.3	54.9	53.0	48.8	47.3	47.5	48.4	50.3	52.6	52.9	53.9	54.1	54.6	51.2	50.7	49.7	48.3	47.1	46.4	45.9	45.7	45.1	50.5	120.0	52.7
,, 19,.....	44.6	43.7	43.1	42.8	42.7	42.2	42.4	42.3	42.3	44.1	45.5	48.3	49.2	50.3	51.0	50.4	49.3	49.1	49.0	49.2	49.6	49.4	50.3	51.1	46.7	122.5	49.3
,, 20,.....	52.1	51.0	50.2	†49.2	†48.9	†48.7	*48.8	*49.0	*49.2	49.5	50.4	50.2	50.7	52.1	52.0	51.4	51.7	50.9	51.0	51.5	51.3	51.5	52.1	52.5	50.7	123.2	51.9
,, 21,.....	52.0	51.7	51.8	51.5	51.5	51.6	51.5	52.4	52.8	54.6	55.2	55.8	53.3	54.8	54.2	53.8	52.3	50.8	51.3	51.2	51.3	52.0	52.4	53.1	52.6	120.5	50.5
,, 22,.....	53.3	53.7	53.6	53.6	52.1	51.8	52.1	52.2	52.4	53.4	54.1	53.8	54.9	55.1	55.1	54.8	54.4	53.4	53.3	52.9	52.8	52.8	52.6	52.6	53.4	120.6	47.0
,, 23,.....	52.7	53.1	52.9	53.1	52.9	50.8	52.0	50.7	49.4	49.7	52.2	53.1	54.1	54.1	54.5	54.5	53.1	52.0	51.3	51.9	51.6	51.3	51.4	51.5	52.2	125.0	44.3
,, 24,.....	52.1	52.8	53.4	53.3	52.3	51.9	52.0	52.2	53.1	54.0	54.9	55.2	56.0	56.3	56.1	55.9	55.0	54.1	54.0	53.9	53.8	53.3	53.3	53.6	53.9	123.5	44.0
,, 25,.....	54.0	54.1	54.6	53.8	54.1	54.2	54.6	53.9	56.4	57.1	57.7	57.2	58.3	57.9	57.3	59.1	59.0	55.4	55.3	56.0	56.7	57.5	56.9	56.0	56.2	124.8	46.7
,, 26,.....	55.7	55.0	54.8	54.4	54.7	54.7	54.3	53.6	53.8	53.5	53.8	55.1	55.1	56.3	55.7	54.9	54.4	54.0	54.0	53.7	53.8	54.1	54.7	54.3	54.5	119.2	54.9
,, 27,.....	53.9	53.6	53.1	52.1	51.6	51.1	50.9	51.2	51.3	51.5	52.8	53.2	53.9	53.2	54.2	53.6	53.2	53.0	53.3	53.4	54.3	54.3	54.1	53.8	52.9	118.1	52.2
,, 28,.....	54.0	53.6	53.0	52.8	52.6	53.0	53.0	54.0	54.5	55.4	56.3	56.4	57.5	57.7	58.3	58.1	57.7	56.9	57.1	57.1	57.0	56.4	56.7	56.7	55.7	123.7	53.2
,, 29,.....	56.5	56.7	56.1	55.7	55.8	56.0	56.3	57.1	57.9	58.1	59.0	*57.9	56.9	57.1	*56.2	55.3	53.9	51.9	51.0	49.2	48.6	48.2	46.7	46.9	54.4	128.1	49.1
,, 30,.....	45.9	45.4	45.2	44.6	44.6	44.6	44.1	44.8	45.9	46.2	49.0	51.1	52.4	51.1	52.1	51.4	50.9	49.9	48.2	47.5	47.3	47.5	47.9	49.2	47.8	125.2	42.7
,, 31,.....	50.6	51.7	51.1	49.6	49.5	50.3	49.9	50.4	51.2	52.2	53.7	53.3	53.9	53.9	53.9	53.2	52.5	51.3	51.3	51.6	51.6	52.6	52.7	53.0	51.9	120.8	49.8
Hourly Means,.....	52.5	52.2	51.8	51.6	51.3	51.1	50.9	51.3	51.8	52.5	53.7	54.1	54.5	54.9	54.9	54.7	54.1	53.4	53.3	53.1	53.0	52.9	52.8	52.5	52.9	124.3	49.2

* Interpolated. † Approximate Reading.

TABLE IV.

MEAN HOURLY AND DAILY RELATIVE HUMIDITY AND TENSION OF AQUEOUS VAPOUR FOR THE MONTH OF DECEMBER, 1884.

Hour.	Hourly Mean.		Date.	Daily Mean.	
	Humidity.	Tension.		Humidity.	Tension.
			1884.		
1 a	69	0.334	Dec. 1,.....	76	0.451
2 „	69	0.330	„ 2,.....	70	0.447
3 „	69	0.321	„ 3,.....	73	0.472
4 „	70	0.324	„ 4,.....	68	0.410
5 „	69	0.319	„ 5,.....	59	0.344
6 „	69	0.317	„ 6,.....	66	0.367
7 „	68	0.310	„ 7,.....	64	0.369
8 „	61	0.306	„ 8,.....	36	0.178
9 „	58	0.297	„ 9,.....	31	0.156
10 „	51	0.293	„ 10,.....	43	0.224
11 „	53	0.303	„ 11,.....	43	0.231
Noon.	50	0.298	„ 12,.....	45	0.219
1 p	47	0.295	„ 13,.....	69	0.361
2 „	48	0.302	„ 14,.....	59	0.366
3 „	50	0.308	„ 15,.....	52	0.266
4 „	53	0.315	„ 16,.....	66	0.353
5 „	56	0.321	„ 17,.....	71	0.411
6 „	60	0.322	„ 18,.....	46	0.213
7 „	63	0.329	„ 19,.....	42	0.192
8 „	65	0.332	„ 20,.....	54	0.267
9 „	67	0.336	„ 21,.....	66	0.322
10 „	69	0.338	„ 22,.....	71	0.346
11 „	70	0.340	„ 23,.....	65	0.306
Midt.	70	0.335	„ 24,.....	71	0.345
			„ 25,.....	75	0.398
			„ 26,.....	70	0.389
			„ 27,.....	71	0.350
			„ 28,.....	76	0.391
			„ 29,.....	63	0.339
			„ 30,.....	59	0.278
			„ 31,.....	69	0.320
Mean, ...	62	0.318	Mean,.....	61	0.310

TABLE V.

DURATION OF SUNSHINE.

Date.	6 a.	7 a.	8 a.	9 a.	10 a.	11 a.	Noon.	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.
1884.													
Dec. 1,	...	0.3	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.4	...
„ 2,	...	...	0.2	0.3	0.8	0.1	0.3	0.9	0.6	0.5	...	...	...
„ 3,	...	...	0.7	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	...	...
„ 4,	...	...	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.9	...	...
„ 5,	...	...	...	0.1	1.0	1.0	1.0	1.0	1.0	1.0	0.7	0.2	...
„ 6,	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 7,	...	...	...	...	0.3	1.0	1.0	1.0	1.0	1.0	1.0	0.3	...
„ 8,	...	0.1	0.9	0.1	0.8	1.0	1.0	1.0	1.0	1.0	1.0	0.3	...
„ 9,	...	0.3	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.4	...
„ 10,	...	0.3	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.2	...
„ 11,	...	0.3	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.2	...
„ 12,	...	0.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.3	...
„ 13,	...	...	0.8	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.8	...	...
„ 14,	...	...	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.1	...
„ 15,	...	0.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.1	...
„ 16,	...	0.2	1.0	1.0	1.0	1.0	0.9	0.5	0.7	...	...	...	...
„ 17,	...	...	0.9	1.0	1.0	1.0	1.0	1.0	0.7	0.2	0.3	...	...
„ 18,	...	...	0.7	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.7	...	...
„ 19,	...	0.2	1.0	1.0	1.0	1.0	1.0	1.0	0.9	1.0	1.0	0.2	...
„ 20,	...	...	...	...	0.3	...	0.9	1.0	0.3	0.1	...	...	...
„ 21,	...	...	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	...	...
„ 22,	...	...	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.2	...
„ 23,	...	...	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	...	...
„ 24,	...	0.2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.1	...
„ 25,	...	...	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	...	...
„ 26,	...	...	0.4	0.9	1.0	1.0	1.0	1.0	1.0	1.0	0.6	...	...
„ 27,	...	...	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.1	...
„ 28,	...	0.3	1.0	1.0	1.0	1.0	0.1	0.1	1.0	1.0	1.0	0.3	...
„ 29,	...	0.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.9	...	...
„ 30,	...	...	...	...	0.9	1.0	0.9	0.5	1.0	1.0	1.0	0.2	...
„ 31,	...	...	...	...	0.5	0.9	1.0	1.0	1.0	1.0	1.0	...	...
Sums,.....	...	3.1	22.6	23.7	27.6	27.1	28.1	29.3	28.2	26.8	24.9	3.9	...
Hourly Means, ...	...	...	...	...	...	...	...	...	...	...	...	...	...

TABLE VII.

DIRECTION AND VELOCITY OF THE WIND, FOR THE MONTH OF DECEMBER, 1884.

DATE.	1 a.		2 a.		3 a.		4 a.		5 a.		6 a.		7 a.		8 a.		9 a.		10 a.		11 a.		Noon.		1 p.		2 p.		3 p.		4 p.		5 p.		6 p.		7 p.		8 p.		9 p.		10 p.		11 p.		Midt.		Sums.	Means.
	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.		
Dec. 1	...	1	6	5	6	8	6	13	6	15	6	17	6	19	6	18	7	24	7	23	8	26	10	22	10	17	10	16	8	17	9	19	9	18	8	12	7	11	7	4	7	5	7	10	7	12	6	9	341	14.2
" 2	7	15	7	17	7	14	7	18	7	21	7	17	7	13	7	23	7	22	7	25	7	27	7	30	7	28	8	22	8	22	7	24	7	22	7	17	6	13	7	15	7	14	7	16	5	15	7	15	460	19.2
" 3	7	16	7	16	6	23	7	19	6	15	4	7	32	8	1	3	9	5	10	15	9	21	8	21	9	20	10	28	9	30	7	24	7	25	7	24	7	30	7	30	7	32	7	30	7	33	7	27	497	20.7
" 4	7	25	7	22	7	21	6	18	6	15	3	10	32	6	2	10	6	8	3	9	4	14	7	16	8	13	8	13	10	18	10	18	8	17	7	11	4	10	32	14	1	8	...	1	1	3	32	5	305	12.7
" 5	32	8	1	10	32	12	32	9	1	14	1	14	1	15	1	13	2	12	1	16	2	18	1	19	1	22	9	20	1	18	1	18	1	20	1	26	1	22	1	26	1	23	2	15	32	22	1	24	411	17.2
" 6	...	1	1	10	32	12	32	10	1	14	32	15	32	17	32	11	32	20	32	21	32	15	32	22	32	19	32	17	1	16	1	17	1	17	1	16	32	14	32	19	1	16	1	13	1	14	1	14	405	16.9
" 7	32	14	31	15	31	16	32	11	32	7	32	4	...	1	31	3	30	3	32	2	31	9	32	9	32	10	32	13	32	13	32	10	1	10	2	5	29	4	2	12	32	7	32	9	32	12	228	9.5
" 8	1	14	1	14	1	8	1	5	...	1	32	14	1	15	1	23	32	15	32	6	31	19	1	19	32	22	32	17	32	17	32	17	32	19	32	23	32	16	1	12	2	15	1	19	1	11	4	2	343	14.3
" 9	2	7	1	6	31	9	32	10	32	22	4	8	30	6	4	10	32	18	32	13	2	8	2	14	1	13	32	14	32	13	1	10	2	9	1	6	1	3	30	6	30	5	4	5	4	11	3	6	221	9.2
" 10	32	6	1	13	1	12	1	4	1	4	2	7	3	5	3	2	9	5	10	5	9	10	10	16	10	16	10	13	9	13	9	10	8	12	9	6	32	4	10	3	12	5	9	5	7	7	3	10	181	7.5
" 11	32	8	1	4	14	4	8	5	8	4	10	1	9	5	7	4	8	5	18	4	15	5	11	2	10	2	7	32	13	32	12	10	12	8	9	7	11	7	8	7	5	7	4	5	7	7	5	7	210	8.7
" 12	2	7	2	14	1	10	1	8	1	15	1	14	32	9	6	16	8	15	4	15	8	15	10	16	10	15	10	12	10	17	10	14	9	11	9	9	10	8	10	6	8	6	12	4	12	2	12	2	260	10.8
" 13	...	0	...	1	12	8	12	3	12	2	8	3	4	2	6	3	9	4	12	7	11	7	9	10	8	11	8	15	8	14	9	14	9	9	9	8	9	6	10	5	18	3	18	3	13	2	141	5.9
" 14	...	1	...	0	13	2	13	4	18	2	13	2	13	2	13	4	32	7	2	7	31	13	32	20	32	15	32	11	24	7	23	6	24	6	27	6	23	5	19	3	...	1	...	1	16	3	12	3	131	5.5
" 15	...	1	...	1	12	2	12	3	...	1	...	1	...	1	17	2	24	3	5	6	8	11	9	15	9	21	9	22	7	17	9	15	9	19	7	14	7	13	7	22	7	17	6	10	5	7	4	8	8	210	8.7
" 16	7	10	4	11	3	9	6	8	6	4	...	1	15	2	10	2	10	9	9	12	10	12	9	15	8	20	8	20	8	19	9	20	8	15	9	15	8	12	8	13	7	11	8	16	7	16	7	17	289	12.0
" 17	7	15	9	18	9	19	8	18	7	13	5	3	12	3	20	2	20	4	23	4	14	5	13	6	9	12	8	13	27	6	3	7	6	3	5	3	10	8	7	13	7	15	7	17	7	17	7	23	247	10.3
" 18	7	20	6	14	7	17	7	14	8	11	32	14	32	13	32	10	32	8	3	4	4	5	6	6	11	9	11	9	15	4	1	9	32	9	1	9	1	7	1	9	1	8	1	5	2	10	3	10	4	274	11.4
" 19	1	20	32	24	1	19	32	20	32	19	32	12	32	9	32	15	32	17	2	8	4	6	14	5	11	9	10	9	10	10	9	11	9	17	8	12	7	10	7	11	7	8	7	5	7	8	7	13	287	12.0
" 20	4	10	2	7	2	7	32	10	1	13	3	9	3	11	3	5	3	5	3	11	4	11	7	9	14	9	20	9	22	8	22	8	21	9	21	9	17	6	10	7	9	7	7	7	7	7	7	12	264	11.0
" 21	7	13	7	11	8	7	6	7	6	7	7	4	8	3	8	6	8	12	10	12	10	13	10	17	10	19	9	21	9	22	9	19	8	16	7	12	10	6	12	6	10	5	11	7	7	7	7	12	331	13.8
" 22	6	13	6	11	6	10	6	11	4	13	6	17	6	15	6	21	6	22	7	21	9	20	7	18	8	18	10	20	10	22	9	21	10	12	7	6	7	5	12	4	10	5	10	4	9	6	8	7	208	8.7
" 23	9	6	...	1	...	0	...	1	10	2	3	3	3	2	3	2	31	4	17	6	11	9	9	14	9	12	8	10	8	7	8	7	7	4	...	1	12	2	12	3	10	5	8	4	...	1	108	4.5
" 24	11	3	8	5	6	11	5	9	6	7	9	6	10	9	8	12	7	13	8	13	10	12	11	13	11	13	9	9	9	6	8	4	9	4	12	3	12	4	8	7	9	10	193	8.0
" 25	9	5	...	1	...	0	8	5	8	8	7	9	6	6	11	6	9	7	11	4	15	2	22	5	17	5	7	5	22	7	25	7	28	5	10	9	10	12	8	10	8	13	7	21	7	24	7	26	204	8.5
" 26	7	20	7	28	7	27	7	22	7	18	7	16	7	14	3	10	3	6	1	8	3	9	4	9	12	4	10	11	8	18	8	20	9	18	9	16	7	14	7	12	7	13	5	13	7	20	7	22	377	15.7
" 27	7	21	6	21	6	23	6	21	6	17	7	17	7	22	7	20	7	23	7	21	7	23	7	24	8	20	7	24	8	21	7	24	7	21	7	25	7	25	6	23	7	27	6	26	7	27	6	28	548	22.8
" 28	6	27	6	22	7	20	7	19	7	16	9	13	8	14	10	16	8	15	8	20	8	24	8	25	8	27	7	23	8	21	8	22	8	18	8	20	8	17	10	15	10	15	10	17	9	15	446	18.6
" 29	8	11	9	11	9	3	...	0	16	3	...	1	17	3	...	1	23	5	24	7	30	7	32	12	32	15	32	21	1	19	32	13	1	17	1	18	2	20	1	16	31	7	2	7	32	8	32	7	238	9.9
" 30	31	10	32	12	32	5	32	8	32	3	...	1	...	1	2	3	32	4	32	9	4	5	10	5	12	5	26	7	11	13	11	14	10	12	8	5	5	4	6	2	12	2	8	3	9	5	7	11	180	7.5
" 31	5	15	5	20	6	19	7	21	5	16	6	13	7	15	5	23	6	17	7	15	10	17	10	16	9	20	9	19	8	19	8	21	9	17	7	15	7	13	7	14	7	18	7	21	7	23	7	25	127	17.8
Sums	...	372	...	373	...	364	...	343	...	327	...	28	...	37	...	336	...	335	...	351	...	401	...	466	...	486	...	482	...	483	...	471	...	447	...	393	...	352	...	351	...	344	...	35	...	335	...	37	9070	377.7
Hourly Means	...	12.0	...	12.0	...	11.7	...	11.1	...	10.5	...	9.0	...	8.4	...	9.5	...	10.8	...	11.3	...	12.9	...	15.0	...	15.7	...	15.8	...	15.6	...	15.2	...	14.4	...	12.7	...	11.4	...	11.3	...	11.1	...	11.3	...	12.0	...	12.0	292.6	13.2

TABLE VIII.

MEAN HOURLY COMPONENTS AND MEAN DIRECTION OF THE WIND, FOR DECEMBER,

Hour.	Components (miles per hour).						Direc
	N	S	E	W	+N-S	+E-W	
1 a.	4.6	0.1	8.0	0.0	4.5	8.0	E
2 „	5.8	0.0	7.2	0.0	5.8	7.2	E
3 „	5.0	0.3	7.4	0.0	4.8	7.4	E
4 „	4.4	0.2	7.2	0.0	4.2	7.2	E
5 „	5.4	0.2	6.0	0.0	5.2	6.0	E
6 „	4.6	0.1	5.2	0.0	4.5	5.2	E
7 „	4.1	0.4	4.5	0.1	3.7	4.4	E
8 „	4.6	0.5	5.5	0.1	4.1	5.4	E
9 „	4.5	0.2	6.7	0.4	4.3	6.3	E
10 „	4.1	0.6	7.5	0.4	3.5	7.1	E
11 „	3.6	1.3	9.1	0.4	2.3	8.7	E
Noon.	3.7	2.0	10.0	0.7	1.6	9.3	E
1 p.	3.7	1.8	10.5	0.6	1.9	9.9	E
2 „	3.5	1.5	11.2	0.5	2.1	10.6	E
3 „	3.6	1.3	10.9	0.5	2.3	10.4	E
4 „	3.7	0.7	10.9	0.4	3.0	10.5	E
5 „	3.4	0.4	10.7	0.3	3.0	10.4	E
6 „	3.7	0.1	8.9	0.1	3.6	8.8	E
7 „	3.8	0.5	7.7	0.2	3.3	7.5	E
8 „	4.5	0.6	6.8	0.2	3.8	6.6	E
9 „	3.7	0.6	7.4	0.1	3.2	7.4	E
10 „	3.8	0.7	7.9	0.0	3.2	7.9	E
11 „	3.8	0.5	8.5	0.0	3.3	8.5	E
Midt.	3.4	0.3	8.9	0.0	3.1	8.9	E
Mean,.....	4.1	0.6	8.1	0.2	3.5	7.9	E

TABLE IX.

DIRECTION AND FORCE OF THE WIND, AT VICTORIA PEAK, AND SEA DISTURBANCE

Date.	4 a.			10 a.			4 p.			10 p.	
	Direction	Force.	Sea.	Direction	Force.	Sea.	Direction	Force.	Sea.	Direction	Force.
1884.											
Dec. 1,.....	...	...	5	E	6	5	E	3	4	E	3
„ 2,.....	...	...	5	E	5	5	E	4	5	NE	4
„ 3,.....	...	...	4	E	4	4	E	4	5	E	4
„ 4,.....	...	...	5	E	4	5	E	4	5	E	4
„ 5,.....	...	...	5	E	4	5	E	4	4	E	4
„ 6,.....	...	...	4	NNE	4	4	NNE	4	4	NNE	4
„ 7,.....	...	...	4	N	4	3	N	4	3	N	1
„ 8,.....	...	...	4	NNE	5	4	N	4	4	N	4
„ 9,.....	...	...	4	NE	5	4	NNE	4	3	NNE	4
„ 10,.....	...	...	3	E	3	4	E	3	4	E	3
„ 11,.....	...	...	3	ENE	4	4	NNE	3	4	NNE	3
„ 12,.....	...	...	4	E	4	4	E	3	4	E	3
„ 13,.....	...	...	4	ENE	3	3	E	3	3	E	3
„ 14,.....	...	...	3	NNE	4	3	ENE	2	3	E	3
„ 15,.....	...	...	3	ENE	4	3	E	4	4	E	4
„ 16,.....	...	...	3	E	2	4	E	3	4	E	4
„ 17,.....	...	...	4	E	4	4	E	4	3	E	4
„ 18,.....	...	...	5	NE	3	5	ENE	3	4	NE	4
„ 19,.....	...	...	4	NNE	4	4	ENE	3	4	E	3
„ 20,.....	...	...	4	ENE	2	4	E	4	4	E	5
„ 21,.....	...	...	4	ENE	3	4	E	3	4	E	4
„ 22,.....	...	...	5	E	5	5	E	3	5	E	3
„ 23,.....	...	...	3	E	3	3	E	4	2	E	4
„ 24,.....	...	...	4	E	4	5	E	4	4	E	4
„ 25,.....	...	...	3	ENE	3	3	ENE	2	2	E	4
„ 26,.....	...	...	5	ENE	3	6	E	3	5	E	5
„ 27,.....	...	...	5	E	5	5	E	5	5	E	5
„ 28,.....	...	...	5	E	4	5	E	3	5	E	3
„ 29,.....	...	...	3	NNE	4	3	N	5	4	N	3
„ 30,.....	...	...	4	N	4	4	ENE	3	4	ENE	3
„ 31,.....	...	...	5	E	4	5	E	3	5	E	4
Mean,.....	...	...	4.1	E 21° N	3.9	4.2	E 17° N	3.5	4.0	E 17° N	3.8

TABLE X.

AMOUNT AND CLASSIFICATION OF CLOUDS AND DIRECTION WHENCE COMING.

Date.	1 a.			10 a.			4 p.			10 p.		
	Amount.	Name.	Direction.	Amount.	Name.	Direction.	Amount.	Name.	Direction.	Amount.	Name.	Direction.
1881.												
Dec. 1, ...	0	...	...	0	...	...	0	...	...	9	sm-cum.	SE
„ 2, ...	7	sm-cum.	SE	8	sm-cum.	SE	9	sm-cum.	SSE	10	sm-cum.	S
„ 3, ...	7	c-cum.	WSW	6	sm-cum.	W	1	cum.	ENE	8	R-cum.	NE
„ 4, ...	10	cum.	E	5	c / c-str.	SSW	3	c / c-str.	WSW	10	cum.	E
„ 5, ...	9	c-cum. / cum.	SSW / SE	7	c-str. / sm-cum.	SW / ENE	8	c-cum. / sm-cum.	SSW / SW	10	str.	...
„ 6, ...	10	cum-nim.	E	10	cum-nim.	NE	10	cum-nim.	ENE	10	nim.	...
„ 7, ...	10	nim.	NNW	3	R-cum.	NNE	0	...	...	0	...	...
„ 8, ...	0	...	...	1	sm-cum.	WSW	0	...	...	0	...	...
„ 9, ...	0	...	...	0	...	...	0	...	...	0	...	...
„ 10, ...	0	...	...	0	...	...	0	...	...	0	...	...
„ 11, ...	0	...	...	0	...	...	0	...	...	0	...	...
„ 12, ...	0	...	...	0	...	...	0	...	...	0	...	...
„ 13, ...	0	...	...	0	...	...	0	...	...	0	...	...
„ 14, ...	0	...	...	0	...	...	0	...	...	0	...	...
„ 15, ...	0	...	...	0	...	...	0	...	...	0	...	...
„ 16, ...	0	...	...	0	...	...	10	sm-cum. / c-cum. / R-cum.	SW / E	8	cum.	SSW
„ 17, ...	0	...	...	0	...	...	6	sm-cum.	W	10	str.	...
„ 18, ...	8	str.	E	0	...	...	0	...	...	0	...	...
„ 19, ...	0	...	...	0	...	...	0	...	...	10	str.	...
„ 20, ...	10	cum.	N	10	sm-cum.	S	9	R-cum.	SSW	0	...	...
„ 21, ...	0	...	...	0	...	...	0	...	...	0	...	...
„ 22, ...	0	...	...	0	...	...	0	...	...	0	...	...
„ 23, ...	0	...	...	0	...	...	0	...	...	0	...	...
„ 24, ...	0	...	...	0	...	...	0	...	...	0	...	...
„ 25, ...	0	...	...	0	...	...	0	...	...	2	cum.	E
„ 26, ...	10	cum.	E	0	...	...	0	...	...	2	cum.	NE
„ 27, ...	7	c-cum. / cum.	NE / E	1	sm-cum.	ENE	0	...	...	3	cum.	E
„ 28, ...	4	cum.	E	1	c-cum.	SSE	3	c-str. / cum.	SW / SE	1	str.	...
„ 29, ...	0	...	...	0	...	...	2	c.	W	0	...	...
„ 30, ...	1	c-cum. / cum.	NW / E	3	cum.	NE	0	...	...	0	...	...
„ 31, ...	10	str.	E	7	sm-cum.	SSW	0	...	...	10	str.	...
Mean, ...	3.2	...	...	2.1	...	...	2.0	...	...	3.3	...	...

TABLE XI.

VICTORIA PEAK.

Date.	Barometer.			Temperature.						
	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.	Sun.	Max.	Min.	Rad.
1884.	ins.	ins.	ins.	°	°	°	°	°	°	°
Dec. 1,.....	28.349	28.330	28.362	58.0	61.6	57.0	120.0	62.5	55.8	53.7
„ 2,.....	28.392	28.334	28.361	58.6	59.2	57.8	130.0	60.6	54.0	54.1
„ 3,.....	28.423	28.320	28.313	61.2	60.2	58.0	125.0	64.6	53.0	52.3
„ 4,.....	28.420	28.362	28.362	59.0	58.8	55.8	120.0	60.6	54.0	54.7
„ 5,.....	28.447	28.365	28.396	56.0	58.8	53.8	121.0	59.0	49.0	44.2
„ 6,.....	28.390	28.325	28.367	48.8	52.7	49.8	85.0	53.8	45.0	48.5
„ 7,.....	28.375	28.310	28.312	49.8	55.8	53.4	122.0	55.8	47.0	46.2
„ 8,.....	28.313	28.258	28.323	50.8	56.8	51.6	118.0	58.5	45.0	41.2
„ 9,.....	28.305	28.226	28.241	51.2	57.4	53.4	120.0	58.0	45.0	44.5
„ 10,.....	28.315	28.277	28.351	55.6	58.8	51.8	121.0	61.1	46.0	44.6
„ 11,.....	28.422	28.368	28.406	56.8	58.8	52.2	120.0	58.8	41.0	42.2
„ 12,.....	28.449	28.368	28.389	53.8	53.8	51.8	123.0	56.1	49.0	43.3
„ 13,.....	28.397	28.311	28.363	53.8	55.8	50.8	117.0	58.7	49.0	42.6
„ 14,.....	28.395	28.336	28.366	55.1	57.8	57.8	121.0	60.8	51.0	46.5
„ 15,.....	28.390	28.327	28.314	56.8	55.8	54.0	123.0	58.8	51.0	48.1
„ 16,.....	28.382	28.318	28.315	57.6	57.6	55.8	126.0	59.0	50.4	48.2
„ 17,.....	28.374	28.307	28.306	58.8	59.8	57.6	123.0	59.9	50.4	49.3
„ 18,.....	28.360	28.347	28.385	51.8	56.8	50.8	115.0	58.1	46.0	42.5
„ 19,.....	28.436	28.348	28.393	49.8	53.8	45.4	117.0	54.8	45.4	40.3
„ 20,.....	28.384	28.305	28.375	51.8	51.8	48.8	117.0	55.7	46.6	44.3
„ 21,.....	28.325	28.277	28.304	51.0	52.8	47.8	116.0	59.7	47.8	44.3
„ 22,.....	28.338	28.278	28.287	52.8	52.8	52.6	115.0	54.2	47.0	45.3
„ 23,.....	28.314	28.221	28.245	53.8	57.8	51.8	118.0	57.8	47.0	46.7
„ 24,.....	28.247	28.172	28.177	54.0	59.0	55.2	120.0	59.6	47.0	46.3
„ 25,.....	28.276	28.191	28.243	56.2	59.8	52.8	121.0	61.8	48.0	48.2
„ 26,.....	28.290	28.240	28.275	53.8	56.8	48.8	115.0	57.8	47.0	44.3
„ 27,.....	28.283	28.217	28.234	51.4	50.1	48.8	116.0	52.7	47.0	44.7
„ 28,.....	28.262	28.204	28.237	55.2	55.2	55.8	124.0	56.7	49.0	50.3
„ 29,.....	28.289	28.235	28.296	58.8	59.1	47.8	119.0	62.7	47.8	48.4
„ 30,.....	28.332	28.268	28.323	46.2	52.8	45.8	117.0	57.7	45.0	39.2
„ 31,.....	28.326	28.249	28.256	49.8	51.8	49.8	116.0	54.8	45.8	46.2
Mean,.....	28.357	28.290	28.319	54.2	56.6	52.4	118.7	58.4	48.0	46.1

TABLE XII.

TEMPERATURE.

Date.	Cape d'Aguilar.					
	4 a.	10 a.	4 p.	10 p.	Max.	Min.
1884.	°	°	°	°	°	°
Dec. 1,.....	63.4	64.8	64.9	65.6	66.0	63.1
„ 2,.....	64.6	65.6	65.1	64.8	66.8	63.8
„ 3,.....	64.6	66.6	65.8	64.6	66.6	63.1
„ 4,.....	62.9	66.6	63.6	61.6	67.3	61.1
„ 5,.....	59.6	63.6	65.6	57.6	67.8	57.6
„ 6,.....	54.6	57.6	60.6	55.6	62.4	54.1
„ 7,.....	58.3	61.6	64.6	57.6	68.8	52.1
„ 8,.....	53.6	58.6	65.8	58.6	68.0	53.1
„ 9,.....	54.6	63.6	64.6	59.6	70.6	51.1
„ 10,.....	57.1	61.6	61.6	57.8	62.8	55.1
„ 11,.....	59.6	63.6	63.8	61.6	65.8	56.9
„ 12,.....	57.6	58.5	59.9	57.6	61.8	55.2
„ 13,.....	56.3	59.6	60.9	59.2	62.9	55.1
„ 14,.....	55.6	65.6	64.6	60.7	73.0	55.1
„ 15,.....	57.6	62.9	62.1	60.6	66.0	55.7
„ 16,.....	57.6	61.8	61.6	61.6	62.8	55.9
„ 17,.....	61.1	64.6	63.0	62.1	66.8	58.7
„ 18,.....	58.6	62.0	64.6	56.6	65.8	56.1
„ 19,.....	53.1	58.9	57.1	57.1	62.0	51.1
„ 20,.....	56.6	60.6	57.1	59.0	61.1	51.1
„ 21,.....	56.6	59.6	59.6	59.6	61.0	56.1
„ 22,.....	57.6	59.2	59.6	56.8	60.7	56.3
„ 23,.....	55.8	64.8	62.1	56.6	65.7	54.1
„ 24,.....	58.1	59.6	62.6	56.6	63.1	56.1
„ 25,.....	57.6	61.2	61.8	61.6	65.8	56.3
„ 26,.....	57.6	58.7	59.8	57.6	63.1	56.8
„ 27,.....	56.6	57.6	56.6	57.4	59.1	55.1
„ 28,.....	56.6	59.6	60.6	58.6	61.3	56.1
„ 29,.....	58.6	69.6	67.6	53.6	71.8	53.1
„ 30,.....	50.6	56.6	56.0	55.6	61.8	50.3
„ 31,.....	54.8	55.6	56.1	56.6	57.8	54.1
Mean, ...	57.6	61.6	62.0	59.0	64.7	55.7

TABLE XIII.
RELATIVE HUMIDITY.

Date.	Observatory.			Cape d'Aguilar.				Victoria Peak.		
	10 a.	4 p.	10 p.	4 a.	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.
1884.										
Dec. 1,	65	68	90	86	74	68	83	80	73	96
" 2,	58	70	80	80	75	85	90	77	85	93
" 3,	65	72	81	86	77	85	91	77	88	97
" 4,	62	66	71	83	76	80	79	75	76	89
" 5,	59	46	63	79	70	66	74	74	61	56
" 6,	70	57	70	84	79	79	92	96	80	87
" 7,	67	51	62	86	69	70	83	88	75	71
" 8,	34	25	30	77	51	46	50	79	43	26
" 9,	22	20	51	71	42	45	67	40	30	47
" 10,	47	41	65	53	50	53	65	42	50	49
" 11,	30	23	70	57	41	49	70	38	40	65
" 12,	34	16	69	57	45	49	68	40	51	67
" 13,	68	59	77	79	69	66	68	68	69	72
" 14,	39	49	74	84	47	57	73	43	39	39
" 15,	34	37	66	67	42	46	72	33	37	64
" 16,	44	60	77	84	56	74	85	46	61	54
" 17,	67	65	70	87	75	83	71	76	75	66
" 18,	49	37	35	78	56	49	60	60	53	48
" 19,	30	40	56	60	43	49	74	47	43	65
" 20,	40	47	63	67	52	71	72	49	37	64
" 21,	69	56	76	90	73	57	77	67	44	84
" 22,	66	64	82	83	75	77	82	73	74	75
" 23,	42	54	74	95	50	61	73	52	54	71
" 24,	65	56	82	87	73	69	93	73	59	67
" 25,	76	69	84	99	81	74	91	73	71	79
" 26,	64	62	80	90	74	74	90	80	70	71
" 27,	62	69	79	86	79	83	92	70	88	85
" 28,	71	69	80	90	79	84	93	79	79	87
" 29,	67	46	59	93	60	48	70	77	64	84
" 30,	56	54	53	80	71	69	65	74	67	84
" 31,	65	67	72	80	86	74	83	78	76	89
Mean,	54	53	69	80	64	66	77	65	62	71

TABLE XIV.
TENSION OF AQUEOUS VAPOUR EXPRESSED IN INCHES OF MERCURY.

Date.	Observatory.			Victoria Peak.		
	10 a.	4 p.	10 p.	10 a.	4 p.	10 p.
1884.						
Dec. 1,	0.403	0.458	0.522	0.389	0.401	0.446
" 2,	0.383	0.465	0.498	0.381	0.434	0.448
" 3,	0.455	0.503	0.493	0.418	0.460	0.468
" 4,	0.387	0.432	0.392	0.376	0.379	0.394
" 5,	0.326	0.289	0.301	0.333	0.303	0.232
" 6,	0.313	0.307	0.307	0.334	0.321	0.311
" 7,	0.341	0.302	0.303	0.315	0.335	0.292
" 8,	0.165	0.148	0.146	0.294	0.195	0.099
" 9,	0.112	0.130	0.245	0.148	0.140	0.189
" 10,	0.246	0.255	0.302	0.186	0.246	0.186
" 11,	0.171	0.151	0.338	0.172	0.195	0.252
" 12,	0.175	0.254	0.298	0.162	0.212	0.257
" 13,	0.344	0.330	0.339	0.282	0.309	0.269
" 14,	0.219	0.320	0.350	0.188	0.183	0.183
" 15,	0.191	0.221	0.317	0.148	0.160	0.269
" 16,	0.250	0.352	0.415	0.219	0.201	0.240
" 17,	0.396	0.428	0.390	0.379	0.389	0.312
" 18,	0.250	0.216	0.163	0.235	0.245	0.176
" 19,	0.134	0.223	0.258	0.166	0.180	0.197
" 20,	0.213	0.256	0.303	0.187	0.141	0.223
" 21,	0.356	0.310	0.337	0.279	0.174	0.283
" 22,	0.333	0.346	0.364	0.291	0.294	0.296
" 23,	0.219	0.312	0.327	0.217	0.258	0.277
" 24,	0.339	0.338	0.373	0.305	0.296	0.295
" 25,	0.415	0.427	0.440	0.330	0.366	0.320
" 26,	0.328	0.343	0.379	0.333	0.323	0.247
" 27,	0.300	0.343	0.378	0.267	0.323	0.294
" 28,	0.375	0.410	0.411	0.348	0.348	0.388
" 29,	0.403	0.296	0.254	0.334	0.322	0.283
" 30,	0.225	0.277	0.232	0.233	0.269	0.260
" 31,	0.314	0.333	0.338	0.282	0.326	0.321
Mean,	0.293	0.315	0.339	0.277	0.284	0.281

W. Doberck,
Government Astronomer.

Hongkong Observatory, 13th July, 1885.

Appendix A.

K. O.
49.

HONGKONG, OBSERVATORY,
12*th February*, 1884.

SIR,—Having devoted a part of my time last autumn in studying past records of the weather by Officers of the Harbour Department, I have the honour to submit the accompanying account e average direction and force of the wind at Victoria Peak.

I have the honour to be,

Sir,

Your most obedient Servant,

W. DOBERCK,
Government Astronomer.

Honourable The COLONIAL SECRETARY,

&c., &c., &c.

On the Mean Direction and Force of the Wind at Victoria Peak.

The Direction and Force of the Wind at Victoria Peak are estimated at different equidistant hours g the day, but no records are kept during the night. The following results are therefore not rom the influence of the diurnal variation of the Wind, but it is to be expected that that influence e found to be comparatively insignificant.

The Mean Direction and Force (0-12) for each day was taken, and Table I exhibits the number ys during each month in three years, when the wind blew from each Direction.

TABLE I.

WIND FREQUENCY AT VICTORIA PEAK.

1880.

	Calm.	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW
...	...	6	2	5	7	9	...	...	...	...	...	...	...	...	...	...	2
...	...	...	2	3	...	10	5	6	...	...	...	...	...	...	...	1	2
...	...	1	2	...	2	13	5	7	...	...	...	...	...	...	...	...	1
...	...	1	1	...	2	13	4	4	1	2	...	...	...	...	...	2	...
...	...	...	1	...	2	8	6	2	...	6	4	1	...	...	...	1	...
...	...	...	...	...	...	2	2	3	1	9	10	2	...	...	...	...	1
...	...	...	...	...	3	5	...	5	2	4	6	4	1	1	...	...	...
...	...	...	...	1	1	4	1	1	1	5	7	5	1	1	2	1	...
...	1	5	...	...	1	8	2	6	1	...	1	...	...	2	1	1	1
...	...	5	2	3	11	8	1	1	...	...	...	...	...	...	...	...	...
...	...	2	2	3	11	10	2	...	...	...	...	...	...	...	...	...	...
...	...	5	3	5	4	12	2	...	...	...	...	...	...	...	...	...	...
...	1	25	15	20	44	102	30	35	6	26	28	12	2	4	3	6	7

1881.

Month.	Calm.	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW
1881.																	
Jan., ...	...	3	1	3	7	11	5	...	...	...	...	...	...	...	...	...	
Feb., ...	...	...	1	1	2	10	3	6	1	4	...	...	...	...	...	...	
Mar., ...	...	3	...	1	5	14	2	3	1	...	...	...	...	...	...	...	
Apr., ...	...	...	1	...	1	4	3	3	6	6	4	1	...	...	...	1	
May, ...	...	...	...	1	...	8	2	...	2	5	7	5	...	1	...	...	
June, ...	...	...	...	1	3	3	6	2	...	12	3	...	...	...	...	...	
July, ...	...	...	...	...	...	3	1	4	...	9	6	4	3	...	...	1	
Aug., ...	...	...	2	...	...	2	3	2	2	7	6	2	...	2	...	3	
Sept., ...	...	4	1	...	2	9	5	...	...	3	2	1	...	...	...	3	
Oct., ...	...	8	2	1	3	10	3	...	...	1	...	...	...	1	...	2	
Nov., ...	...	...	1	2	4	22	1	...	...	...	...	...	...	...	...	...	
Dec., ...	...	2	3	9	4	13	...	...	...	...	...	...	...	...	...	...	
Sums, ...	...	20	12	19	31	109	34	20	12	47	28	13	3	4	...	10	

1882.

Month.	Calm.	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW
1882.																	
Jan., ...	...	2	1	3	4	16	...	2	...	1	...	...	...	...	...	...	
Feb., ...	...	4	5	4	3	7	...	1	1	1	...	...	...	...	...	1	
Mar., ...	...	3	5	2	2	11	...	3	1	3	1	...	...	...	...	...	
Apr., ...	...	...	1	1	1	8	4	3	2	9	1	...	...	...	...	...	
May, ...	...	1	...	...	...	7	6	...	...	13	2	2	...	...	...	1	
June, ...	...	...	...	...	...	5	3	2	2	16	2	...	...	...	...	...	
July, ...	...	1	...	1	...	8	1	3	...	15	...	...	1	1	...	...	
Aug., ...	...	3	...	...	...	4	...	2	...	8	4	7	...	1	1	...	
Sept., ...	...	1	1	1	1	16	2	1	1	1	1	1	...	...	1	...	
Oct., ...	...	...	...	4	1	17	6	...	...	...	...	...	...	1	1	1	
Nov., ...	...	5	6	5	5	9	...	...	...	...	...	...	...	...	...	...	
Dec., ...	...	8	5	4	2	11	1	...	...	...	...	...	...	...	...	...	
Sums, ...	...	28	24	25	19	119	23	17	7	66	11	10	1	3	3	3	

The next Table exhibits the percentage of Frequency of Winds from different Directions r
to eight points and the Mean Direction of the Wind, calculated by aid of LAMBERT's Formula fo
Frequencies without regard to the Force. The Mean Direction is expressed both in Degrees
Points of the Compass.

TABLE II.

PERCENTAGE OF WIND FREQUENCY AND MEAN DIRECTION OF THE WIND.

Month.	N	NE	E	SE	S	SW	W	NW	Mean Direction.	
									In Degrees.	In Points.
January,	17	24	50	5	1	...	...	3	E 26° N	ENE
February,	11	17	39	21	8	...	...	4	E 3° N	E
March,	13	11	48	20	5	1	...	2	E 5° N	E
April,	3	5	36	22	27	4	...	3	E 35° S	SE by E
May,	2	3	33	11	33	15	1	2	E 60° S	SE by S
June,	1	3	19	16	51	10	...	...	E 71° S	SSE
July,	1	3	20	15	37	18	5	1	E 77° S	S by E
August,	5	3	13	9	32	25	7	6	W 81° S	S by W
September,	14	5	44	14	8	4	4	7	E 4° N	E
October,	16	19	50	7	1	...	3	4	E 22° N	ENE
November,	13	27	58	2	...	...	...	...	E 22° N	ENE
December,	22	31	45	...	2	...	...	...	E 32° N	NE by E
Year,	10	13	38	12	17	6	1	3	E 11° S	E by S

Hongkong is situated within the region of the North-East Trade, which farther out in the Pacific reigns supreme all the year round, but under the influence of the Asiatic Continent an annual variation of the Direction of the Wind originates. During the Winter the Direction of the Monsoon coincides with that of the Trade, and we find from Table II, that during seven months of the year (from September to March incl.) the Mean Direction of the Wind is from East or North of East. During the other five months the Direction is South of East, but the Easterly Direction predominates over the Westerly, except during one month, August, when the Direction is South by West. It is therefore obvious that there does not at any time of the year reign a South-West Monsoon at Hongkong, such as there does in India. But although the power of the North-East Trade is generally superior to its antagonist, the South-West Monsoon, the latter, whenever its pent up energy causes an instable equilibrium, is capable of making a furious resistance, such as is witnessed in the Typhoons, but even these, powerful as they are, must yield to the trade and recede towards the West except during a few Summer months, when the Mean Direction of the Wind is Southerly, as shewn in Table II. Then they follow a track towards the North, till they reach the regions, which lie North of the Trade, where the Direction of the Wind is from South-West.

Table III exhibits the average Force of the Wind (0-12) from different points of the Compass during three years and the mean result of the three years. The superior Force of the East Wind, whose superior Frequency was seen from Table II, is here seen at a glance. The exceptionally small Force of the West North West Wind is due to the sheltering influence of the Continent :—

TABLE III.

FORCE OF THE WIND FROM DIFFERENT DIRECTIONS.

1880.

Month.	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW
1880.																
January,	3.1	2.5	2.2	3.0	3.4	...	...	...	...	...	...	...	...	...	...	2.5
February,	...	2.5	2.9	...	3.7	3.5	3.7	...	...	...	...	...	...	...	3.4	3.2
March,	2.6	2.6	...	2.0	2.8	1.9	1.7	...	...	...	...	...	...	...	...	2.8
April,	1.2	2.8	...	3.0	3.6	2.4	2.4	4.2	3.2	...	...	...	...	...	2.2	...
May,	...	3.0	...	2.8	2.2	2.6	2.8	...	2.6	2.5	4.0	...	...	...	1.8	...
June,	...	...	...	...	4.7	3.1	3.5	2.8	3.8	4.0	3.3	...	...	...	...	1.2
July,	...	...	...	2.0	4.1	...	2.9	2.1	2.2	2.7	3.9	1.8	2.0	...	...	...
August,	...	...	1.8	2.2	3.6	1.6	4.2	2.8	2.9	2.8	2.4	2.8	2.4	1.7	2.2	...
September,	3.2	...	...	3.2	3.6	4.3	2.5	1.6	...	1.0	...	...	1.8	2.0	3.0	2.2
October,	3.3	2.8	2.3	2.8	3.4	6.6	1.6	...	...	...	...	...	...	...	...	...
November,	3.0	2.7	3.8	3.1	3.2	1.3	...	...	...	...	...	...	...	...	...	...
December,	4.2	3.3	3.6	4.3	4.1	3.0	...	...	...	...	...	...	...	...	...	...
Year,	3.3	2.8	2.9	2.9	3.4	2.8	2.7	2.6	3.0	3.1	3.2	2.3	2.0	1.8	2.5	2.5

1881.

Month.	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW
1881.																
January, ...	3.6	2.0	2.7	3.2	4.0	1.9	...	...	...	...	...	...	...	...	...	3.9
February, ...	...	2.4	2.0	3.2	3.6	3.9	3.3	3.4	3.4	...	...	...	...	...	...	...
March, ...	3.3	...	2.4	3.3	3.8	4.7	3.1	4.2	...	...	...	...	...	...	...	4.1
April, ...	...	3.0	...	4.2	4.9	4.1	4.6	3.4	4.8	4.4	3.4	...	...	...	3.8	...
May, ...	...	...	5.2	....	4.0	3.5	...	2.2	3.5	4.0	2.8	...	2.6	...	...	...
June, ...	...	...	1.6	3.1	3.7	3.5	3.0	...	3.4	5.8	...	...	...	...	...	...
July, ...	...	...	...	...	6.4	3.4	4.1	...	3.6	3.0	2.7	3.7	...	...	3.2	...
August, ...	...	4.4	...	...	6.6	3.3	2.9	5.0	3.4	3.1	2.8	...	3.4	...	4.3	...
September,...	3.3	3.2	...	3.5	4.4	3.6	...	...	4.1	3.1	4.2	...	...	...	4.2	...
October, ...	4.7	3.8	3.0	5.1	5.8	2.3	...	...	3.6	...	...	...	1.8	...	3.0	...
November, ..	...	3.6	3.1	4.3	4.2	2.4	...	...	...	...	...	...	...	...	...	...
December, ...	4.2	3.7	3.7	3.2	3.8	...	...	...	...	...	...	...	...	...	...	...
Year, ...	4.0	3.5	3.3	3.6	4.3	3.3	3.6	3.5	3.7	3.8	2.9	3.7	2.8	...	3.9	3.7

1882.

Month.	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	N
1882.																
January,.....	4.1	1.4	2.9	3.3	4.6	...	3.3	...	3.0	...	...	...	...	...	...	
February,....	3.6	3.0	3.2	3.6	4.0	...	4.4	5.0	5.0	...	...	...	...	...	3.2	
March, ...	2.7	3.3	3.8	4.4	4.2	...	4.0	3.6	3.5	3.6	...	...	...	...	...	
April, ...	...	3.6	3.6	3.4	4.0	4.2	3.1	3.1	3.8	5.0	...	...	...	...	...	
May, ...	2.6	...	...	...	4.5	3.7	...	...	4.1	3.7	3.2	...	...	...	3.2	
June, ...	...	...	...	...	4.9	3.6	4.0	2.8	3.9	4.0	...	...	...	...	...	
July, ...	4.4	...	5.2	...	4.1	1.4	5.4	...	4.2	...	...	3.2	4.8	...	...	
August, ...	3.3	...	...	...	4.2	...	4.3	...	4.2	3.7	3.2	...	4.6	3.6	...	
September,...	5.0	3.2	4.0	3.0	5.2	3.3	5.6	3.0	4.8	4.6	3.4	...	...	2.8	...	
October, ...	...	...	3.0	4.0	5.1	4.0	...	...	...	...	...	...	3.0	2.0	3.2	
November,...	4.9	4.3	3.6	4.4	5.2	...	...	...	...	...	...	...	...	...	...	
December, ...	4.0	3.9	3.6	3.3	4.2	3.0	...	...	...	...	...	...	...	...	...	
Year, ...	3.7	3.8	3.5	3.8	4.7	3.7	4.2	3.3	4.0	3.9	3.2	3.2	4.1	2.8	3.2	

MEAN OF 1880, 1881 AND 1882.

Month.	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW
1880-81-82.																
January, ...	3.6	2.0	2.6	3.2	4.0	0.6	1.1	...	1.0	...	...	...	...	...	...	3.1
February,....	1.2	2.9	2.7	2.3	4.1	2.5	3.8	2.8	2.8	...	...	...	...	...	2.2	2.5
March, ...	2.9	1.9	2.1	3.2	3.6	2.2	2.8	2.6	1.2	1.2	...	...	...	...	...	2.3
April, ...	0.4	3.1	1.2	3.5	4.2	3.6	3.4	3.6	3.9	3.1	1.1	...	...	...	2.0	...
May, ...	0.9	2.0	1.7	0.9	3.6	3.3	0.9	0.7	3.4	3.4	3.3	...	0.9	...	1.7	...
June, ...	...	...	0.5	1.0	4.4	3.4	3.5	1.9	3.7	4.6	1.1	...	...	...	...	0.4
July, ...	1.5	...	1.7	0.7	4.9	1.6	4.1	0.7	3.3	1.9	2.2	2.9	2.3	...	1.1	...
August, ...	1.1	1.5	0.6	0.7	4.8	1.6	3.8	2.6	3.5	3.2	2.8	0.9	3.5	1.8	2.2	1.5
September,...	3.8	2.1	1.3	3.2	4.4	3.7	2.7	1.5	3.0	2.9	2.5	...	0.6	1.6	2.4	2.4
October, ...	2.7	2.2	2.8	4.0	4.8	4.3	0.5	...	1.2	...	...	...	1.6	0.7	2.1	...
November,...	2.6	3.5	3.5	3.9	4.2	1.2	...	...	...	...	...	...	...	...	...	...
December, ...	4.1	3.6	3.6	3.6	4.0	2.0	...	...	...	...	...	...	...	...	...	...
Year, ...	3.7	3.4	3.2	3.6	4.1	3.3	3.5	3.1	3.6	3.6	3.1	3.1	3.9	1.5	3.2	3.5

The following Table exhibits the Mean Force of the Wind, without reference to Direction, during the different months of the year. It appears, that the Force of the Wind is somewhat greater in Autumn than Spring. This is no doubt due to the Typhoons.

The cause of the apparently progressive Mean Annual Force of the Wind, as exhibited at the bottom of the Table, I am unable to trace. It therefore remains to be investigated whether this is connected with the eleven—yearly Sunspot-period, or whether it is due to some other agency:—

TABLE IV.

MEAN MONTHLY FORCE OF THE WIND.

Month.	Year.			Mean.
	1880.	1881.	1882.	
January, ...	2.9	3.2	4.0	3.4
February, ...	3.5	3.4	4.1	3.7
March, ...	2.4	3.7	3.8	3.3
April, ...	3.0	4.2	3.8	3.7
May, ...	2.5	3.6	3.9	3.3
June, ...	3.7	3.6	4.0	3.8
July, ...	2.9	3.7	4.2	3.6
August, ...	2.7	3.7	3.8	3.4
September, ...	2.9	3.9	4.6	3.8
October, ...	3.1	4.5	4.4	4.0
November, ...	3.0	4.1	4.4	3.8
December, ...	3.9	3.7	3.9	3.8
Year, ...	3.0	3.8	4.1	3.6

W. DOBERCK,
Government Astronomer.

Hongkong Observatory, February 12th, 1884.

Appendix B.

K. O.
. 80.

HONGKONG OBSERVATORY,
24th February, 1884.

SIR,—I have the honour to submit the accompanying account of the average degree of Cloudiness Hongkong. It shews that the atmosphere here is particularly clear during the autumn, while the ring is rather dull. Just the reverse of this obtains in England, where clear weather is common only spring. The importance of this circumstance cannot be over-estimated from an astronomical point view. It is a fact well known to practical astronomers that the part of the sky which is visible ring the spring months in the evening in the United Kingdom has been especially investigated, ile the autumn sky is still comparatively less known. It now appears that Hongkong is most ourably situated for observing during the autumn. So that not only can phenomena be watched e at an hour when they are invisible in England, owing to the difference in Longitude, but that even stracting from Southern Constellations, the part of the Northern sky which it is most difficult to serve in England can be particularly well explored from this Colony.

I have the honour to be,

Sir,

Your most obedient Servant,

W. DOBERCK,
Government Astronomer.

he Honourable The COLONIAL SECRETARY,

&c., *&c.,* *&c.*

On the Mean Cloudiness of Hongkong.

The amount of sky covered by clouds has been roughly noted for several years at Cape d'Aguilar d at Victoria Peak at different equidistant hours during the day, but no records were kept during the ght. The following results are therefore not free from the influence of the diurnal variation of the ount of clouds, but they exhibit nevertheless clearly the annual variation.

The mean amount of sky covered by clouds, expressed in percentage of the whole sky, during the fferent months of the years 1880–1884 inclusive, is exhibited in Table I:—

TABLE I.

AMOUNT OF CLOUDS.

	CAPE D'AGUILAR.					VICTORIA PEAK.				
	1880	1881	1882	1883	Mean	1880	1881	1882	1883	Mean
nuary,	...	30	51	55	45	54	42	56	63	54
bruary,	...	83	56	90	76	91	76	63	68	75
arch,	...	51	68	93	71	49	71	63	73	64
pril,	...	50	81	80	70	69	88	71	80	77
ay,	...	46	75	64	62	82	66	82	76	76
ne,	81	45	64	57	62	81	54	72	53	65
ly,	62	65	57	67	63	58	64	57	58	59
ugust,	69	53	54	60	59	59	62	63	61	61
ptember,	59	46	50	66	55	49	51	56	76	58
tober,	50	49	37	53	47	45	51	45	44	46
ovember,	19	52	66	74	53	40	66	49	55	52
ecember,	51	54	64	49	54	49	62	42	41	49
ear,	...	52	60	67	60	61	63	60	62	61

It will be remarked that the amount of clouds is greater at the Peak than at the Cape. The re of that is that the observer was in the habit of registering the whole sky as covered by clouds when the Peak was enveloped by a cloud. Of course the difference increases together with the amou clouds.

The Mean percentage is 64.2 for the months December, January and February; 68.8 for the mon March, April and May; 61.5 for the months June, July and August; and 51.8 for the months Septem October and November.

It thus appears that the cloudiness is greater in spring than in the autumn, and that Octo the least cloudy month. There is a maximum of cloudiness in April, but curiously enough this is exceeded by February. At the end of January the sky becomes rapidly overcast, and at the en February there is again some clear weather.

W. Doberck.
Government Astron.

Hongkong Observatory, February 24th, 1884.

Appendix C.

ON THE MEAN MONTHLY AND ANNUAL RAINFALL AT HONGKONG.

The amount of Rain fallen during the previous twenty-four hours has been for several years collected and measured at Stone Cutters' Island at Noon every day. This island is situated in a sheltered position,—very favourable for the collection of Rain. The rim of the gauge is circular, 8 inches in diameter and is placed 2 feet 4 inches above the Ground, and about 15 feet above Sea Level. The amount of Precipitation has been measured in hundredths of an inch, the thousandths being neglected, so that the registered amount though fairly accurate, is likely to be a little too small.

The Monthly and Annual Rainfall during the years 1878-1883 inclusive is exhibited in Table I. The Mean Annual Rainfall is 90 inches. The Rainy Season sets in, in May or at the end of April and ends in September or in October, but occasionally very little Rain falls in September. The Mean Semi-Annual Rainfall from May to October inclusive is 76.08 inches, and from November to April it is 13.90 inches.

By comparison with the Table of Cloudiness published in a previous Report, it appears, that this is greater during the Dry than during the Rainy Season.

TABLE I.

MONTHLY AND YEARLY RAINFALL AT HONGKONG.

Month.	1878.	1879.	1880.	1881.	1882.	1883.	Mean.
January,	1.50	0.63	2.14	0.00	0.11	0.06	0.74
February,	2.99	1.56	2.56	0.09	0.61	0.12	1.32
March,	5.96	5.26	0.25	1.89	0.66	9.88	3.98
April,	4.53	5.03	2.60	14.14	4.11	6.37	6.13
May,	22.34	8.48	13.17	3.65	14.20	17.50	13.22
June,	11.74	8.30	28.48	4.52	7.86	12.57	12.25
July,	4.68	15.74	15.10	24.55	13.00	19.90	15.50
August,	14.75	12.83	12.83	26.78	13.76	24.45	17.57
September,	1.52	17.47	15.12	4.71	4.46	22.76	11.01
October,	12.25	2.99	13.74	8.50	1.29	0.40	6.53
November,	0.00	1.39	0.00	2.28	3.16	1.78	1.44
December,	0.03	0.09	1.00	0.36	0.00	0.25	0.29
Total,	82.29	79.77	106.99	91.47	63.22	116.04	89.98

W. Doberck,
Government Astronomer.

Hongkong Observatory, March 19th, 1884

Appendix D.

NOTICE.

Steps are being taken to erect a mast for hoisting storm-signals at Tsim-sha Tsui Police Station. In the meantime, whenever there are indications of strong wind, notice will be given to the Harbour Office, the Telegraph Companies, and to the Newspapers.

In the China Sea the earliest signs of a dangerous atmospheric depression are clouds of the cirrus type travelling from the East or thereabout, a slight rise in the Barometer, and light wind accompanied by a swell in the sea.

These signs are usually followed by a rapidly falling Barometer with increasing Temperature and humidity, while the sky presents a threatening and vaporous appearance. When the wind rises, it veers or backs according to the part of the depression in which the ship is situated, and according to the course steered with reference to the centre. If the Barometer falls very rapidly, and the wind is steady but increasing in force, the ship is in danger of running into the centre of the depression. Masters of ships should bear in mind, that the wind is incurving at some distance from the centre and especially in the rear of a Typhoon.

Depressions may be encountered at any season of the year, but are very rare in winter and spring. They are most frequent in September. Typhoons cannot exist south of nine degrees northern latitude.

W. DOBERCK,
Government Astronomer.

Hongkong Observatory, 25th May, 1884.

Appendix E.

HONGKONG OBSERVATORY.

On the relative frequency of Storms in various Seas for different Months in the Year.

The following table exhibits for each month in the year the number of dangerous Atmospheric pressions, expressed in percentage of the average total number, that is yearly recorded in various as. The similarity between the relative frequency of Typhoons in the China Sea and of Hurricanes the West Indies is striking. The former have their maximum in September and their minimum in ebruary, while the latter have their maximum in August and their minimum in January. About alf the number of both Typhoons and Hurricanes occur in August and September, but the relative equency of Typhoons in May and November slightly exceeds the relative frequency of Hurricanes. he Cyclones of the Southern Indian Ocean are distributed in a similar manner but have their maximum February and their minimum in July. But the Cyclones in the Bay of Bengal and the Arabian ea are quite different and have maxima at the changes of the monsoon in May and October.

ocality, ...	Arabian Sea.	Bay of Bengal.	Southern Indian Ocean.	Java Sea.	China Sea.	Havana.
umber of Years, ...	234	139	40	?	85	363
umber of Storms, ...	70	115	53	12	214	355
uthority, ...	Chambers.	Blanford.	Piddington, Thom. & Reid.	Piddington & Thom.	Schück.	Poey.
anuary, ...	6	2	17	25	2	1
ebruary, ...	4	0	25	42	0	2
arch, ...	3	2	19	8	2	3
pril, ...	13	8	15	8	2	3
ay, ...	18	18	7	0	5	1
ne, ...	29	9	0	0	5	3
ly, ...	3	3	0	0	10	12
ugust, ...	3	4	0	0	19	27
eptember, ...	4	5	2	0	27	23
ctober, ...	6	27	2	0	16	17
ovember, ...	14	16	7	0	8	5
ecember, ...	3	8	6	17	3	2

W. Doberck,
Government Astronomer.

Hongkong Observatory, 3rd June, 1884.

Appendix F.

NOTICE.

Meteorological Signals will be hoisted on the mast in front of the Police Barracks at Tsim-sha-

A red drum will be hoisted to indicate the existence of a typhoon somewhere to the East of the Colony.

A red cone pointing upwards will indicate, that a typhoon exists in a latitude more northern than the Colony, or, that it is progressing towards North.

A red cone pointing downwards will indicate, that a typhoon exists in a latitude more southern than the Colony, or, that it is progressing towards South.

A red ball will indicate, that a typhoon exists somewhere to the West of the Colony.

2. For the purpose of giving *Storm-warnings* to the Colony, a gun has been placed at the foot of e mast facing Victoria. It will be fired once, whenever a strong gale of wind is expected here. It ll be fired twice, whenever the wind is expected to blow with typhoon force. And it will be fired un if possible, when the wind is likely to suddenly shift round,—such shifting being frequently ompanied by great disasters to the shipping.

3. In view of the fact, that typhoons—although their area of strong wind and severe weather is limited.—determine the prevailing wind and weather a thousand miles or more away, being surnded by a fine-weather area of so great extent,—the meteorological signals will enable masters of ssels days beforehand to foresee the weather likely to be encountered in different localities and to derstand changes of weather, and their knowledge of the law of storms combined with their practical perience will enable them to shape their course so as to not only avoid the dangerous part of a phoon, but so as to find out and benefit by favourable winds.

4. The public are supposed to be guided not solely by those signals, but to consult *The China ast Meteorological Register* for further particulars. In fact the signals are hoisted to call attention information contained in that register, as exhibited at the Office of the Great Northern Telegraph mpany.

5. The Admirals of the British and Foreign Squadrons in China, and Masters of Vessels trading these seas having been requested to send in their logs to this Department, whenever they encounter rong wind or bad weather, have cordially responded by forwarding a number of typhoon-logs, which ll be invaluable for the future investigation of typhoons.

6. Several Captains have volunteered to keep continuous Meteorological Registers when at sea, d have been supplied with registers of the form now adopted by many of the Commissioners of storms at the Treaty Ports. These forms may be had on application to this Department, and the phoon-logs may be obtained from the Harbour Master, who has courteously volunteered to distribute em.

7. Instruments used in observing will be verified at the Observatory if sent there. Aneroid rometers may be set while in the Harbour by comparison with the data given in *The China Coast teorological Register*.

Hongkong Observatory, 11th August, 1884.

W. Doberck,
Government Astronomer.

Appendix G.

HONGKONG OBSERVATORY.

Meteorological Observations made during the Typhoon of the 10th and 11th September, 1884.

The Barometer began to fall here as early as the 4th September, and gradients indicated moderate light winds,—circumstances which are frequently followed by a Typhoon. On the 6th it was pointed out in the *China Coast Meteorological Register*, that the Barometer was still falling, and especially S.E. of here. In the afternoon of the 7th, a moderate westerly breeze blew over the Philippine Islands, and the Barometer rose in Shanghai and the following day also in Tonquin, those stations being then covered by the anticyclonic area. On the 8th, the Red Drum was hoisted on the signal mast. The center of the Typhoon was then North of Luzon. Light winds continued to blow here interrupted by calms. The direction whence coming of the lower clouds, which was S.E. on the 4th, backed to N.E. on the 6th, while the upper clouds already on the 5th came up slowly from N.E., and were found to have backed to North on the 7th, when their velocity was moderate. On the 9th the Barometer had fallen at all stations, the cyclonic area had reached here and a moderate breeze from N.N.E. was felt. The upper clouds came moving fast from E.N.E. On the 10th at 5.45 a. directions to fire the Typhoon Gun one round were given, a strong northerly gale being expected, at 10.15 a. the following notice was telegraphed to the Treaty Ports:—"Typhoon approaching Hongkong from the East," and at 6.28 p. directions to fire the Typhoon Gun two rounds were given, it being then certain, that the velocity of the wind would reach 80 miles an hour.

After passing Hongkong the center moved westward, which I signalled by replacing the Red Drum by the Red Ball. It entered the mainland between Hongkong and St. John Island.

The first column of the following table exhibits the epoch, the second the height of the Barometer in inches, reduced to 32° Fahrenheit at Mean Sea Level. The absolute minimum 28.979 occurred at 2.20 a. on the 11th. The third column exhibits the Temperature in degrees Fahrenheit, the fourth the Relative Humidity, the fifth the Tension of Vapour in inches of mercury, the sixth the Rain in inches (from half an hour before to half an hour after the epoch named), the seventh the Velocity of the Wind in miles per hour, the eighth its Direction, the ninth the Amount, the tenth the Name, and the eleventh the Direction whence coming of the Clouds:—

1884.	Barometer.	Temperature.	Humidity.	Vapour Tension.	Rain.	Wind.		Clouds.		
						Velocity.	Direction.	Amount.	Name.	Direction.
Sept. 10, 11, 0 a.	29.436	80.2	68	0.708	0.005	48	N by E	10	nim.	NNE
" .15	.427	80.3	68	.710		48	"	"	"	
" .30	.423	78.0	79	.755		46	"	"	"	
" .42	.417	78.0	78	.746		42	"	"	"	
" Noon.	.412	77.9	78	.740	0.040	46	"	"	"	
" .15 p.	.406	77.4	78	.734		50	"	"	"	
" .30	.397	76.8	80	.742		54	"	"	"	
" .45	.384	76.3	83	.748		48	"	"	"	
" 1. 0	.376	76.9	79	.741	0.065	48	"	"	"	NNE
" .15	.365	77.0	81	.748		44	"	"	"	
" .30	.363	76.8	82	.757		48	"	"	"	
" .45	.353	76.4	84	.763		46	"	"	"	
" 2. 0	.352	76.3	84	.761	0.165	48	"	"	"	
" .15	.340	75.6	87	.774		48	"	"	"	
" .30	.325	76.0	86	.773		52	North	"	"	
" .45	.320	75.8	87	.780		51	N by E	"	"	
" 3. 0	.328	75.5	89	.788	0.325	44	"	"	"	
" .15	.322	75.4	89	.788		44	"	"	"	
" .30	.320	76.1	88	.793		48	"	"	"	
" .45	.317	75.0	93	.807		48	"	"	"	
" 4. 0	.314	75.2	93	.809	0.640	42	"	"	"	NE
" .15	.321	76.6	87	.798		44	NNE	"	"	
" .30	.325	76.1	90	.808		38	"	"	"	
" .45	.309	76.4	88	.804		36	"	"	"	

1884.	Barometer.	Temperature.	Humidity.	Vapour Tension.	Rain.	Wind.		Clouds.		Direct
						Velocity.	Direction.	Amount	Name.	
Sept. 10, 5. 0 p.	29.308	76.2	90	0.811	0.440	34	NNE	10	nim.	
" " .15	.298	76.1	91	.813		38	N by E	"	"	
" " .30	.287	76.2	90	.811		38	NNE	"	"	
" " .45	.290	76.9	87	.810		38	"	"	"	
" " 6. 0	.270	77.1	87	.816	0.970	52	"	"	"	
" " .15	.257	76.7	88	.809		52	"	"	"	
" " .30	.253	76.3	89	.810		50	"	"	"	
" " .45	.261	76.0	91	.814		56	"	"	"	
" " 7. 0	.248	77.2	86	.807	1.190	52	"	"	"	
" " .15	.223	76.0	91	.814		54	"	"	"	
" " .30	.213	76.9	87	.807		58	"	"	"	
" " .45	.236	76.9	88	.819		58	"	"	"	
" " 8. 0	.249	76.5	92	.840	0.520	54	NE by N	"	"	
" " .15	.250	77.2	90	.840		52	NE	"	"	
" " .30	.232	77.8	91	.862		60	NE by E	"	"	
" " .45	.225	77.9	89	.844		64	"	"	"	
" " 9. 0	.238	77.9	89	.852	0.040	66	"	"	"	
" " .15	.223	78.2	87	.844		66	"	"	"	
" " .30	.213	78.1	90	.862		64	NE	"	"	
" " .45	.200	78.6	88	.859		72	NE by E	"	"	
" " 10. 0	.182	78.8	84	.835	0.170	76	ENE	"	"	EN
" " .15	.173	78.9	87	.853		80	NE by E	"	"	
" " .30	.123	78.2	90	.865		82	"	"	"	
" " .45	.109	78.1	89	.857		88	"	"	"	
" " 11. 0	.116	78.3	89	.863	0.365	92	ENE	"	"	
" " .15	.104	78.0	92	.881		80	"	"	"	
" " .30	.094	77.5	93	.883		78	"	"	"	
" " .45	.087	77.9	91	.873		90	"	"	"	
" " Midt.	.036	78.1	89	.857	0.650	88	"	"	"	
" 11, 12.15 a.	.008	76.8	95	.876		88	"	"	"	
" " .30	.035	77.2	94	.883		84	"	"	"	
" " .45	29.044	77.3	93	.877		82	E by N	"	"	
" " 1. 0	28.998	76.9	94	.874	0.950	92	ENE	"	"	
" " .15	29.000	76.7	96	.886		90	E by N	"	"	
" " .30	29.019	77.2	94	.883		82	E	"	"	
" " .45	29.010	77.2	94	.879		76	E by N	"	"	
" " 2. 0	28.990	77.0	95	.886	0.725	82	E	"	"	
" " .15	29.009	77.1	95	.893		89	E by S	"	"	
" " .30	.026	77.0	95	.882		90	"	"	"	
" " .45	.032	77.0	95	.882		86	"	"	"	
" " 3. 0	.024	77.1	93	.871	0.530	86	"	"	"	
" " .15	.042	76.9	95	.887		82	"	"	"	
" " .30	.089	77.3	94	.886		80	ESE	"	"	
" " .45	.108	77.4	93	.880		80	SE by E	"	"	
" " 4. 0	.129	77.6	91	.864	0.340	78	SE	"	"	
" " .15	.138	77.7	89	.846		76	"	"	"	
" " .30	.157	77.6	91	.864		74	"	"	"	
" " .45	.165	77.4	90	.846		64	"	"	"	
" " 5. 0	.196	77.4	91	.851	0.295	56	SE by S	"	"	S
" " .15	.207	77.6	89	.839		56	"	"	"	
" " .30	.223	78.0	88	.842		48	"	"	"	
" " .45	.236	77.7	90	.855		46	"	"	"	
" " 6. 0	.243	77.7	89	.842	0.145	52	"	"	"	
" " .15	.259	77.6	90	.848		52	"	"	"	
" " .30	.262	77.4	91	.851		50	"	"	"	
" " .45	.274	77.2	91	.845		56	SSE	"	"	
" " 7. 0	.288	77.2	91	.845	0.240	64	"	"	"	
" " .15	.299	77.1	91	.846		60	"	"	"	
" " .30	.313	77.0	91	.847		66	"	"	"	
" " .45	.315	76.1	92	.829		64	"	"	"	
" " 8. 0	.346	76.6	92	.840	0.330	64	"	"	"	
" " .15	.348	76.9	91	.844		68	"	"	"	
" " .30	.351	76.8	92	.846		60	"	"	"	
" " .45	.389	76.5	93	.849		48	"	"	"	
" " 9. 0	.397	76.4	93	.850	0.270	44	"	"	"	
" " .15	.411	76.7	92	.846		44	S by E	"	"	
" " .30	.427	77.1	91	.842		50	SSE	"	"	
" " .45	.427	77.1	91	.842		50	"	"	"	
" " 10. 0	.444	77.0	91	.843	0.070	50	"	"	"	S
" " .15	.439	77.3	89	.839		56	"	"	"	
" " .30	.455	77.3	91	.848		52	"	"	"	
" " .45	.455	77.8	88	.836		48	"	"	"	

W. DOBERCK,
Government Astron

Hongkong Observatory, 24th September, 1884.

Appendix H.

NOTICE.

From the first day of January 1885, the new Electric Time-ball by S. A. VARLEY is to be dropped at Tsimshatsui by the Mean Time Clock at the Observatory.

The ball will be hoisted half-mast at $12^h\ 55^m$ p., hoisted to the top at $12^h\ 57^m$ p. and dropped at $1^h\ 0^m\ 0^s.0$ p. Hongkong Civil Time.

Hongkong Civil Time is henceforth counted from the meridian of the Observatory, *i. e.* the meridian passing through the middle of the transit instrument and through the middle of the white meridian-mark erected, according to a triangulation by the Surveyor General, 11,354 feet south of the transit instrument on the side of the hill above Wantsai.

The longitude of the Observatory is, according to observations made by Lieut. Commander GREEN, U.S.N., in 1881, $7^h\ 36^m\ 41^s.86$ East of the meridian of the Royal Observatory, Greenwich.

The geographical latitude of the Observatory is 22° 18′ 12″.2 North according to Colonel PALMER's observations in 1882.

The Time-ball will enable masters of vessels to examine and rate their chronometers without taking them on shore, and by permission of the Right Honourable the Secretary of State for the Colonies, chronometers may, on payment of a fee, be deposited at the Observatory for examination and rating, and certificates of the constants of each chronometer and of the relative trustworthiness of different chronometers may be issued by me.

W. DOBERCK,
Government Astronomer.

Hongkong Observatory, 25th November, 1884.

Appendix I.

HONGKONG OBSERVATORY.

Magnetic Observations made during the year 1884.

The observations of Declination and Horizontal Force were all made with the Kew pattern Unifilar Magnetometer, Elliott Brothers No. 55. The Dip observations were made with one of the needles (No. 1) of the Dip-circle, Dover No. 55, the other needle being found useless on my arrival here, it having apparently been insufficiently packed. The needle No. 1 quickly deteriorated and became useless as early as August, although I did my best to preserve it. The Swedish man-of-war *Vanadis* visiting the port in October an officer was good enough to lend me two needles by Dover, and the first observation on October 22nd was made with No. 2, the second observation as well as that made on the following day were made with No. 1. The mean of these observations was adopted for September, October, November and December.

The circle-reading on the Unifilar Magnetometer corresponding to true North was determined by observations of Polaris reflected from the speculum, and also occasionally by observations of the Sun and bright stars near the first vertical. The typhoon in September blew the roof off the magnetic hut, and the mean of the observations made in August and October was adopted for September.

The observations of Horizontal Force are expressed in C. G. S. Units (One centimeter, one gramme, one second) but the monthly synopsis exhibits X, the Horizontal, as well as Y, the Vertical, and the Total Forces, which have been computed by aid of the observed Dips, also in English Units, (one foot, one grain, one second) and in Gauss's Units (one millimeter, one milligramme, one second).

The value of log σ^2 K adopted is 3.44997 at 20° Cent., the Induction-Coefficient is: 4.915 the reduction of m, the magnetic moment of the vibrating magnet at a temperature of t° Cent. to the freezing point of water is: $+0.000\ 293t + 0.000\ 0016t^2$.

The distances between the centres of the deflecting and the deflected magnets are expressed in centimeters and the value of the constant P employed in the formula of reduction: $\frac{m}{X} = \frac{m'}{X'}\left(1 - \frac{P}{r^3}\right)$ is: +8.568.

The times of vibration exhibited in the table are each derived from 12 observations of the time occupied by the magnet in making 100 vibrations, corrections having been applied for rate of chronometer and arc of vibration.

The mean value of the magnetic moment of the vibrating magnet was 0.54245 in English Units, and 708.20 in C. G. S. Units.

OBSERVATIONS OF MAGNETIC DECLINATION AND DIP.

1884.	H.K.M.T.	Declination, East.	Observer.	H.K.M.T.	A.	B.	Dip North.	Observer.
January,	16d. 4h. 6m. p.	0° 51′ 15″	W.D.	19d. 3h. 27m. p.	32° 23′.2	90° 0′.0	32° 23′.2	F.G.F.
	17 10 55 a.	52 2	,,	19 5 20 p.	32 23.7	90 0.0	23.7	W.D.
	18 11 30 a.	47 50	,,	...	...	...	...	...
February,	15 12 58 a.	0 49 25	,,	14 1 25 p.	32 19.9	90 0.0	19.9	,,
				16 12 20 p.	32 21.2	90 0.0	21.2	,,
March,	15 3 12 p.	0 47 47	,,	14 5 10 p.	41 51.3	41 52.6	21.8	,,
April,	16 2 17 p.	0 46 13	,,	16 1 16 p.	57 52.0	34 42.2	25.0	,,
May,	16 3 15 p.	0 48 15	,,	15 4 0 p.	42 7.3	41 50.9	28.2	,,
				17 12 32 p.	32 27.2	90 0.0	27.2	,,
June,	15 12 43 p.	0 47 52	,,	21 5 53 p.	32 28.5	90 0.0	28.5	,,
July,	18 3 0 p.	0 47 48	,,	15 3 50 p.	32 33.9	90 0.0	33.9	,,
August,	18 1 26 p.	0 48 39	,,	20 3 45 p.	42 8.9	41 37.9	22.9	,,
October,	17 11 51 a.	0 46 52	,,	22 5 10 p.	32 31.4	90 0.0	31.4	,,
				22 5 47 p.	32 29.6	90 0.0	29.6	F.G.F.
				23 5 20 p.	32 29.4	90 0.0	29.4	W.D.
November,	13 1 22 p.	0 45 46	,,	...	...	...	...	...
December,	14 4 35 p.	0 45 12	,,	...	...	...	...	...

OBSERVATIONS OF HORIZONTAL MAGNETIC FORCE.

Date. 1884.	H.K.M.T.	Time of one Vibration.	Temperature. Cent.	Log m X Mean.	Value of m.	H.K.M.T.	Distance in Centimeters.	Temperature. Cent.	Deflection.	Log $\frac{m}{X}$ Mean.	Value of X.
		s									
January 17,...	12h 25m p.	3.2908	20°.6			2h 36m p.	30	20°.6	8° 35′ 18″		
	5 36 p.	3.2934	19 .5	2.41671	724.82		40	...	3 35 46	3.30376	0.36034
„ 18,...	12 24 p.	3.2941	21 .6	2.41723	725.53	4 0 p.	30	18 .3	8 35 59		
							40	...	3 36 11	3.30408	0.36023
February 15,...	12 28 p.	3.2926	16 .2			3 28 p.	30	16 .6	8 34 51		
	5 13 p.	3.2939	16 .2	2.41578	723.08		40	...	3 35 27	3.30260	0.36024
March 16,...	1 5 p.	3.2992	23 .1			2 1 p.	30	23 .5	8 32 1.5		
	1 22 p.	3.2990	23 .4	2.41540	721.58		40	...	3 34 32.5	3.30118	0.36067
April 15,...	12 35 p.	3.3056	25 .1			1 14 p.	30	25 .1	8 30 46.5		
	1 37 p.	3.3036	25 .35	2.41426	720.48		40	...	3 34 3	3.30098	0.36028
May 16,...	11 39 a.	3.3121	25 .8			12 37 p.	30	27 .15	8 27 46		
	1 23 p.	3.3133	27 .05	2.41235	717.23		40	...	3 32 57	3.29896	0.36032
June 16,...	12 25 p.	3.3269	30 .6			1 18 p.	30	30 .35	8 23 18		
	1 8 p.	3.3286	31 .5	2.40923	712.08		40	...	3 31 9	3.29583	0.36033
July 16,...	11 44 a.	3.3146	32 .9			12 19 p.	30	32 .8	8 19 6.5		
	12 51 p.	3.3431	33 .2	2.40540	706.17		40	...	3 29 7.5	3.29242	0.36015
August 18,...	2 52 p.	3.3576	31 .8			3 19 p.	30	31 .75	8 14 59		
	3 56 p.	3.3568	31 .8	2.40175	700.12		40	...	3 27 22.5	3.28859	0.36023
October 15,...	2 57 p.	3.3756	26 .2			3 29 p.	30	26 .0	8 9 47.5		
	4 5 p.	3.3767	25 .95	2.39578	690.92		40	...	3 25 20	3.28808	0.36004
„ 25,...	3 45 p.	3.3792	26 .25			5 5 p.	30	24 .8	8 9 41.5		
	4 36 p.	3.3785	26 .25	2.39504	690.07		40	...	3 25 12.5	3.28270	0.35989
November 14,...	11 55 a.	3.3800	24 .3			12 23 p.	30	...	8 7 16		
	12 53 p.	3.3818	24 .5	2.39422	687.78		40	24 .35	3 24 25	3.28069	0.36039
December 15,...	12 39 p.	3.3819	21 .4			1 13 p.	30	...	8 7 10		
	1 50 p.	3.3859	21 .8	2.39253	685.65		40	21 .8	3 23 36	3.27957	0.36011

RESULTS OF MAGNETIC OBSERVATIONS IN 1884.

Month 1884.	Declination East.	Dip North.	Magnetic Force. English Units. X	Y	Total Force	Metric Units. X	Y	Total Force	C. G. S. Units. X	Y	Total F
January, ...	0° 50′ 22″	32° 23′ 27″	7.8116	4.9557	9.2510	3.6018	2.2849	4.2655	0.36018	0.22849	0.4265
February,...	49 25	32 20 33	7.8128	4.9472	9.2474	3.6024	2.2811	4.2638	0.36024	0.22811	0.4263
March, ...	47 47	32 21 48	7.8222	4.9571	9.2606	3.6067	2.2856	4.2699	0.36067	0.22856	0.4269
April, ...	46 13	32 25 0	7.8138	4.9619	9.2562	3.6028	2.2879	4.2679	0.36028	0.22879	0.4267
May, ...	48 16	32 27 42	7.8147	4.9712	9.2620	3.6032	2.2921	4.2705	0.36032	0.22921	0.4270
June, ...	47 52	32 28 30	7.8148	4.9738	9.2634	3.6033	2.2934	4.2712	0.36033	0.22934	0.4271
July, ...	47 48	32 33 54	7.8110	4.9886	9.2680	3.6016	2.3001	4.2734	0.36016	0.23001	0.4273
August, ...	43 39	32 22 54	7.8127	4.9545	9.2512	3.6023	2.2844	4.2656	0.36023	0.22844	0.4265
September,.	(45 15)	(32 26 31)	(7.8106)	(4.9648)	(9.2550)	(3.6013)	(2.2892)	(4.2673)	(0.36013)	(0.22892)	(0.4267
October, ...	46 52	32 30 8	7.8085	4.9750	9.2587	3.6004	2.2939	4.2690	0.36004	0.22939	0.4269
November, .	45 46	(32 30 8)	7.8162	4.9798	9.2676	3.6039	2.2961	4.2732	0.36039	0.22961	0.4273
December, .	45 12	(32 30 8)	7.8100	4.9759	9.2604	3.6011	2.2943	4.2698	0.36011	0.22943	0.4269
Mean, ...	0° 47′ 2″	32° 26′ 44″	7.8132	4.9671	9.2585	3.6026	2.2902	4.2689	0.36026	0.22902	0.4268

W. Doberck,
Government Astronomer.

Hongkong Observatory, 15th December, 1884.

Appendix J.

LUNAR TRANSITS ACROSS THE MERIDIAN OF HONGKONG.

The following transits of the moon were observed by eye and ear with Troughton & Simms's three inch transit instrument and the sidereal standard clock. The clock-correction was determined by aid of the Nautical Almanac apparent places of stars, and the right ascensions of the moon here exhibited are therefore subject to the corrections, which are applied to that catalogue. The first column shews the day of the month in Hongkong, the second the mean time, the third the limb of the moon, that was observed, the fourth the position of the instrument,—clamp east or west,—the fifth the mean of the seven wires, the sixth the reduction to the meridian, the seventh the clock-correction, the eighth the resulting right ascension, the ninth the seconds of right ascension in Nautical Almanac (to which Newcomb's corrections are now applied), the tenth the apparent error of Nautical Almanac in right ascension. From data exhibited in this column it appears that the semi-diameter in Hansen's lunar tables must be diminished by $0^s.127 = 1''.905$ in order to represent these observations. This correction was applied to the Nautical Almanac and the eleventh column exhibits then the error of the Nautical Almanac, the mean of which was $+ 0^s.091 = + 1''.365$.—The longitude of the Observatory is $7^h\ 36^m\ 41^s.86$ East.

Date.	H.K.M.T.	Limb.	Clamp.	Mean of Wires.	Reduction to Meridian.	Clock Slow.	Observed R.A.	N.A. R.A.	Apparent Error of N.A. in R.A.	Corrected Error of N.A. in R.A.
1884.										
Nov. 25	$5^h\ 34^m\ 20^s.44$	I.	W	$5^s.27$	$-6^s.17$	$15^s.01$	$21^h\ 53^m\ 20^s.11$	$20^s.21$	$+0^s.10$	$+0^s.23$
„ 26	6 26 42 .38	I.	E	30 .31	+ .11	15 .79	22 43 46 .21	46 .25	+ .04	+ .17
„ 27	7 8 5 .73	I.	E	57 .11	+ .11	16 .69	23 35 13 .91	13 .94	+ .03	+ .16
„ 28	7 57 17 .40	I.	W	12 .28	− .21	18 .14	0 28 30 .21	30 .17	− .04	+ .09
„ 29	8 49 5 .13	I.	W	4 .08	− .28	19 .21	1 24 23 .01	23 .01	.00	+ .13
„ 30	9 44 8 .17	I.	E	11 .54	+ .18	19 .93	2 23 31 .65	31 .44	− .21	− .08
Dec. 1	10 42 39 .23	I.	E	47 .90	− .09	21 .07	3 26 8 .88	8 .80	− .08	+ .05
„ 2	11 44 7 .85	I.	E	22 .21	− .12	22 .07	4 31 44 .16	44 .07	− .09	+ .04
„ 7	16 42 35 .40	II.	E	16 .68	− .38	27 .22	9 50 43 .52	43 .84	+ .32	+ .19
„ 8	17 32 31 .28	II.	E	15 .81	− .26	28 .61	10 44 44 .16	44 .45	+ .29	+ .16
„ 9	18 19 57 .06	II.	E	44 .35	− .20	30 .14	11 36 14 .29	14 .49	+ .20	+ .07
„ 10	19 5 44 .04	II.	E	33 .97	− .14	31 .51	12 26 5 .34	5 .58	+ .24	+ .11
„ 11	19 50 40 .91	II.	W	33 .56	− .30	32 .91	13 15 6 .17	6 .66	+ .49	+ .36
„ 12	20 35 30 .06	II.	E	24 .63	+ .21	34 .38	14 3 59 .22	59 .34	+ .12	− .01
„ 13	21 20 41 .46	II.	W	38 .76	− .05	35 .89	14 53 14 .60	14 .81	+ .21	+ .08
„ 26	6 38 28 .96	I.	E	59 .70	+ .06	52 .67	0 59 52 .43	52 .50	+ .07	+ .20
„ 27	7 29 45 .10	I.	E	19 .41	+ .08	54 .05	1 55 13 .54	13 .54	.00	+ .13
„ 28	8 24 21 .86	I.	W	0 .28	− .16	55 .71	2 53 55 .83	55 .73	− .10	+ .03
„ 29	9 22 33 .59	I.	E	16 .78	+ .10	56 .80	3 56 13 .68	13 .58	− .10	+ .03
„ 30	10 23 49 .77	I.	E	38 .08	+ .11	58 .28	5 1 36 .47	36 .37	− .10	+ .03
1885.										
Jan. 2	13 32 17 .40	II.	W	22 .08	− .11	62 .78	8 22 24 .75	24 .76	+ .01	− .12
„ 4	15 22 57 .33	II.	W	10 .14	− .20	66 .03	10 21 15 .97	16 .05	+ .08	− .05

W. Doberck,
Government Astronomer.

Hongkong Observatory, 23rd January, 1885.

Appendix K.

ON THE HEIGHT OF VICTORIA PEAK.

The height of Victoria Peak has been calculated (from the monthly means of observations made during 1884) by aid of Ferrel's tables derived from the formula:—

$$H=60521.5\ (\log.\ B'-\log\ B)\ (1+.001017\ [t'+t-64°])\ (1+.189\tfrac{b'}{B'})\ (1+.189\tfrac{b}{B})\ (1+\frac{2h'}{r})\ (1+\frac{H}{r})$$
$$(1+.002606\ \cos.\ 2\lambda).$$

H represents the difference of height between the upper and lower stations—here, the Peak and the Observatory; B the barometric pressure reduced to 32° Fahrenheit at the upper station as exhibited in the third column of the following table; B′ the same at the lower station as exhibited in the second column; t the temperature of the air at the upper station, t′ the same at the lower station as exhibited in the fifth and the fourth columns; b the tension of aqueous vapour at the upper station, b′ the same at the lower station as exhibited in the seventh and the sixth columns; h′ the height of the lower station above mean sea level—here, 107.1 feet, and λ the geographical latitude of the upper station—here, about 22° 16′.

Month.	B′	B	t′	t	b′	b	H
1884.	ins.	ins.	°	°	ins.	ins.	feet.
January, ...	30.093	28.302	62.3	55.4	0.443	0.404	1713.4
February, ...	30.061	28.244	57.0	50.8	0.377	0.337	1723.0
May, ...	29.752	28.038	74.8	68.4	0.736	0.662	1703.9
June, ...	29.662	27.965	80.1	72.4	0.859	0.767	1709.0
July, ...	29.581	27.893	82.2	74.7	0.908	0.816	1712.6
August, ...	29.625	27.937	81.8	74.6	0.886	0.802	1709.0
September, ...	29.685	27.993	81.2	73.9	0.811	0.741	1706.0
October, ...	29.920	28.198	77.2	70.0	0.698	0.634	1707.8
November, ...	29.996	28.228	67.8	60.9	0.490	0.457	1715.6
December, ...	30.119	28.323	59.6	53.3	0.318	0.281	1706.1
Mean, ...	29.849	28.112	72.4	65.4	0.652	0.590	1710.6

It will be remarked that no correction for barometric gradient has been applied, in fact the height of the barometer reduced to sea level does not differ more than a fraction of a thousandth of an inch between the two stations, nor is a correction for diminution of gravity with increasing height called for as both barometers are mercurial.

The mean of the resulting differences of height increased by 107.1 feet, the height of the lower station above mean sea level, gives finally the height of the Peak at the highest level of the rock where the look-out tower is erected. The differences in the results exhibited in the last column of the table are due principally to the fact, that it has been assumed that the mean of the temperatures of the air at the Observatory and at the Peak, represents accurately the average temperature of the air between the two stations. The probable error of the final result has been determined from these differences, to be about 14 inches. The height is therefore determined with such accuracy and a more accurate result can only be obtained from several years observations.

Altitude of Victoria Peak=1818 feet+1½ feet above mean sea level.

W. Doberck,
Government Astronomer.

Hongkong Observatory, 5th February, 1885.

Appendix L.

NOTICE TO MARINERS. (Typhoons)

In the China Sea the earliest signs of a typhoon are clouds of the cirrus type looking like fine hair, feathers or small white tufts of wool travelling from East or North, a slight rise in the barometer, clear and dry but hot weather and light winds.

* *

These signs are followed by a falling barometer, while the temperature rises still further. The air becomes oppressive from increasing dampness and the sky presents a threatening and vaporous appearance.—A swell in the sea and also phosphorescence of the water as well as glorious sunsets are other signs useful to the mariner, who is acquainted with the usual conditions in the locality.

If the typhoon is approaching, the sky becomes overcast, the temperature in consequence decreases, the dampness increases and the barometer falls more rapidly, while the wind increases in force. Nearer the centre the wind blows so that no canvas can withstand it, and the rain pours down in torrents, but there is no thunder and lightning. Still nearer the centre there is less wind and rain and the sky partly clear, but the sea is tremendous. This is therefore the most dangerous portion.

The whereabout of the centre of a typhoon may, in the China Sea, be ascertained by the rule:—stand with your back to the wind, and you will have the centre on your left side, but between two and four points in front of your left hand. There are however certain exceptions to this rule. Thus there often blows a steady Easterly gale along the southern coast of China, when a typhoon is crossing the China Sea, and the gale blows often steady from North-East about the northern entrance to the Formosa Straits, when there is a typhoon in a more southern latitude.

When you have ascertained from the changes in the barometer and in the wind, in which semi-circle your vessel is situated, you should if in the right-hand semicircle keep the wind on the starboard tack, and if in the left-hand semicircle you should run on the starboard tack or heave to on the port tack, but it is dangerous to lie to in a typhoon, particularly before you are sure that the centre is past. Vessels near the coast of China or in the Formosa Straits generally seek refuge in the nearest typhoon harbour indicated in the Directory.

Vessels leaving Hongkong are warned from the Observatory. Vessels leaving Singapore are enabled by observing the rules given above to sail round the typhoon, till they find themselves on the eastern border, when they may regain their lost distance. The force of the wind is usually greatest in the semicircle north of the centre. Typhoons are not met south of nine degrees northern latitude.

Typhoons may be encountered at any season of the year but are most frequent in August and September. They appear to originate south-east of the Philippine Islands. In August and September they frequently pass East of Formosa or travel towards north-west up through the Straits or strike the coast of China. Afterwards they usually recurve towards north-east and pass over Japan or across the sea north of Japan, but not with the violence that is characteristic of tropical storms. During the remainder of the year they most frequently cross the China Sea from east to west.

W. Doberck,
Government Astronomer.

Hongkong Observatory, 11th May, 1885.

Appendix M.

ON THE PROGRESSIVE MOTION OF TYPHOONS IN 1884.

Hongkong is situated in the region of the trades, but the winds are greatly affected by the neighbouring continents,—principally by the immense Asiatic mainland, but to some extent also by Australia,—the influence of which is the cause of the monsoons. Thus we find, that although the average direction of the wind here is E,—a direction to some extent caused by the trend of the coast,—it still exhibits a regular annual variation.

The air is impelled from a region where the barometric pressure is higher, towards one where it is lower, its motion being however deflected toward the right in the northern hemisphere, owing to the rotation of the earth.—In winter, when the pressure is high over China and low over Northern Australia, E or NE winds blow almost without interruption over the China Sea. In spring, when the barometer is falling over Southern Asia, the direction of the wind veers toward S and reaches SW, when about midsummer the lowest pressure lies over Central Asia and a high pressure over Australia. In autumn the direction of the wind backs by degrees to NE.

The SW monsoon does not however blow so steadily as the NE monsoon, possibly because the summer area of low pressure is not so regular as the winter area of high pressure in Asia, and the easterly trade wind, supported by the—at that season—comparatively high pressure over the North Pacific, intrudes even in midsummer.

It is explained in the "Annual Weather Report for 1884," how the changes in the height of the barometer increase with the latitude. North of Hongkong the barometric pressure is subject to much greater changes than south of it. In consequence the E wind in winter increases in force with a rising barometer, and the SW wind in summer increases in force with a falling barometer, except in the presence of a typhoon.

During the winter season depressions originate within the area of Asia, which is covered by the high pressure, and pass Eastward. These are analogous to the depressions, which originate in Nebraska and cross the Atlantic, and which also have their maximum frequency and intensity in winter. Those depressions lie outside the field of our investigations, and will no doubt continue to have the attention of the Observatories in the North of China.

The typhoons appear to have their origin E or SE of the Philippines in the trough of low pressure between the two high-pressure areas in the North Pacific and in Australia. Their paths are determined according to the law, first enunciated by the Rev. CLEMENT LEY, according to which an atmospheric depression moves so as to keep the high-pressure area on its right. This law was originally proved only in the case of depressions in the neighbourhood of the United Kingdom, but it applies equally to the typhoons. Now the application of this law would greatly facilitate forecasts concerning the progress of a typhoon, if the telegraphic information were sufficient to give a correct idea of the position and shape of the area or areas of high pressure, as it is known, that these are subject to comparatively little change.

Typhoons may be divided into three classes according to the paths, which they generally follow. No doubt abnormal instances will occasionally present themselves, in China as well as in other countries, but probably they will be of rare occurrence.

The first class of typhoons is common at the beginning and at the end of the typhoon season. Typhoons belonging to this class cross the China Sea, and pass either in a WNW direction from the neighbourhood of Luzon towards Hainan and Tonquin, as Typhoons II and V, or, if pressure is high over Siam and Annam, they pass first Westward and subsequently SWestward, as Typhoon XVIII.—Their life is generally between 5 and 6 days.

The second class of typhoons is perhaps the most frequently encountered, and their paths can be traced the farthest. They generally move NWestward in the neighbourhood of Luzon, and recurve towards NE in about 26°,—or rather between 22° and 32°,—northern latitude. They either strike the coast before recurving, as Typhoons III, IV*, IX and XII, in which case they generally at once lose the character of tropical hurricanes, or travel along the coast up through the Straits of Formosa,

* Typhoon IV struck the coast travelling NWestward, but passed North of Formosa, which appears to be an unusual path. It is remarkable to note, how Typhoons III and IV struck the coast near Foochow, Typhoon IX in a lower latitude near Swatow, and Typhoon XII lower still, near Macao.

as Typhoons I and XIV. After recurving, they generally cross Japan or the Sea of Japan, or the coast of Corea. These paths are explained simply according to CLEMENT LEY'S law:—while of the high pressure in the North Pacific they pass NWestward, when arrived W of it, they Northward, and when arrived NW of it, they pass NEastward, and no doubt subsequently East if their energy is not expended, before they are N of the area.— They are common about the midd the typhoon season, and their life is on an average 7 days.

Typhoons of the third class are possibly the most common, but it appears that they are frequently encountered, and therefore perhaps often escape observation. They pass E of For moving Northward. After recurving they frequently skirt the Southern Coast of Japan, or enter traverse the Sea of Japan, as Typhoons VI, X, XI and XIII. A typhoon of this class freque follows after one of the second class. When the latter has recurved, the former proceeds North This is explained by the circumstance, that the effective low-pressure area in Asia,—the prece typhoon,—is then in fact considerably E of its normal position. It is also well known, that depres are attracted towards places, which have just been traversed by a depression.—Their life is of m tain duration.

Typhoons of the fourth class pass S of Luzon, moving apparently Westward or first West and then SWestward. They are perhaps not uncommon, but are really situated outside the fie our investigations. They appear in some respects to differ from typhoons of the other classes, a believe, that they are accompanied by thunderstorms. They are situated in so low a latitude, tha effect of the earth's rotation is much less than in case of other typhoons, and as they appear to qu approach the equatorial belt, they form perhaps a link between typhoons proper, and the atmosp disturbances in that neighbourhood, which are unconnected with rotating winds.—Their life ap to be between one and two days.

The average velocity of the typhoons of 1884 was as follows:—E of Luzon: 7 nautical mile hour. In the China Sea between 12° and 18° N: 6 miles an hour. In the China Sea between H kong, Luzon and Southern Formosa: 11 miles an hour. About Hainan: 13 miles an hour. Formosa: 10 miles an hour. In the Formosa Straits: 12 miles an hour. In Kwangtung, Fo and Kiangsi: 10 miles an hour. About Shanghai: 12 miles an hour. In Northern China: 23 an hour. About Japan: 19 miles an hour. In the Sea of Japan: 30 miles an hour.

W. DOBERCK,
Government Astrono

Hongkong Observatory, 16th July, 1885.